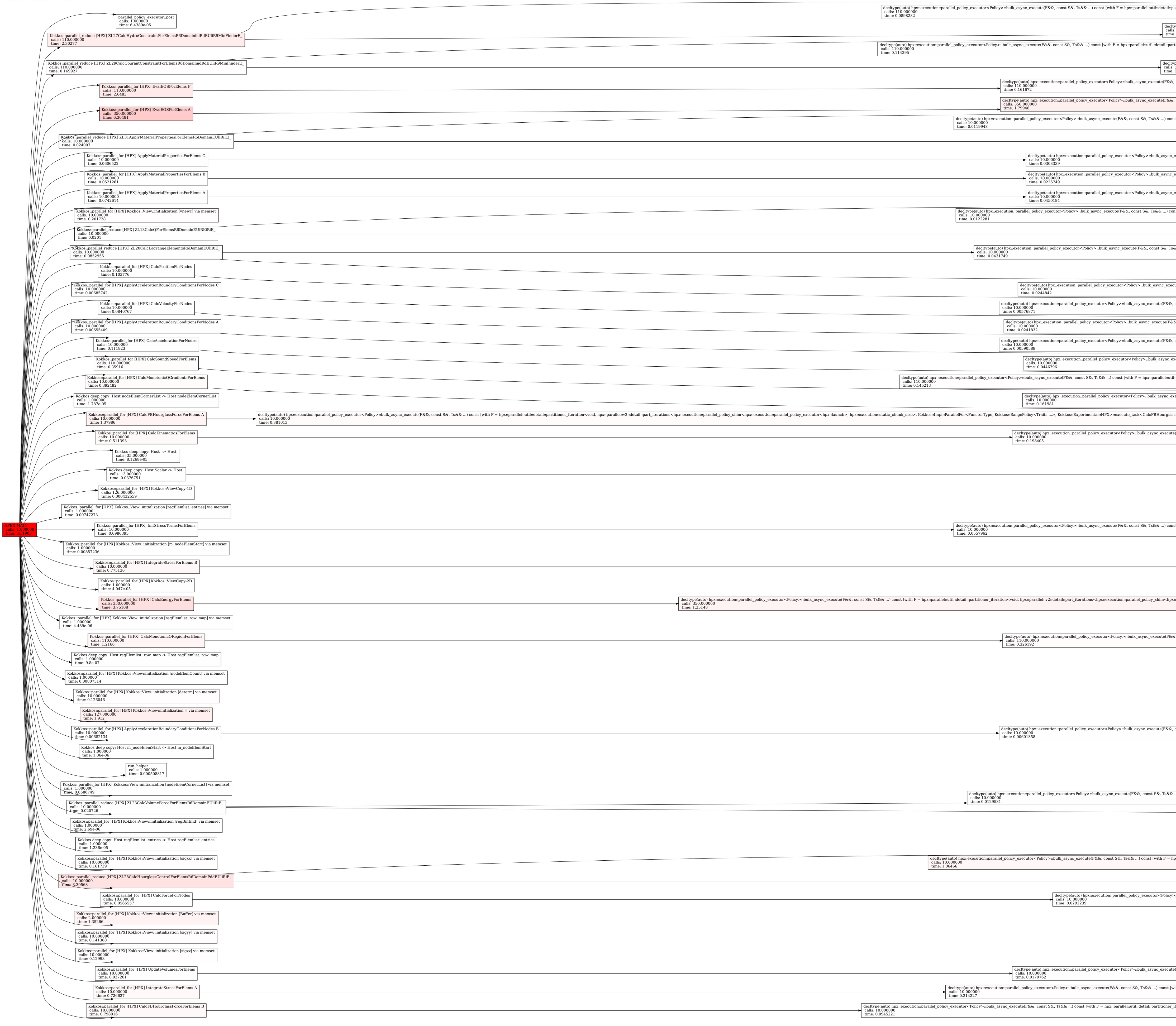
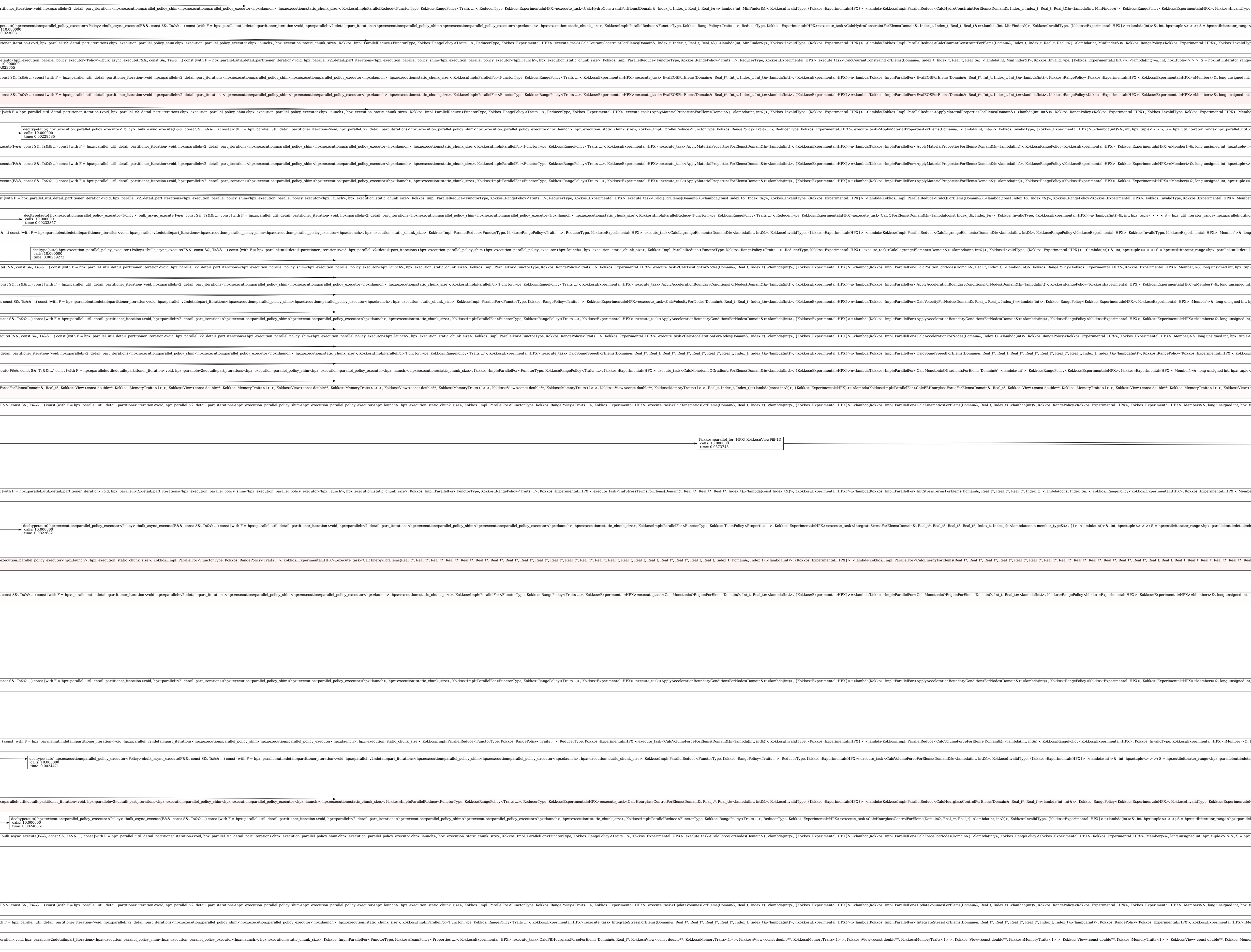
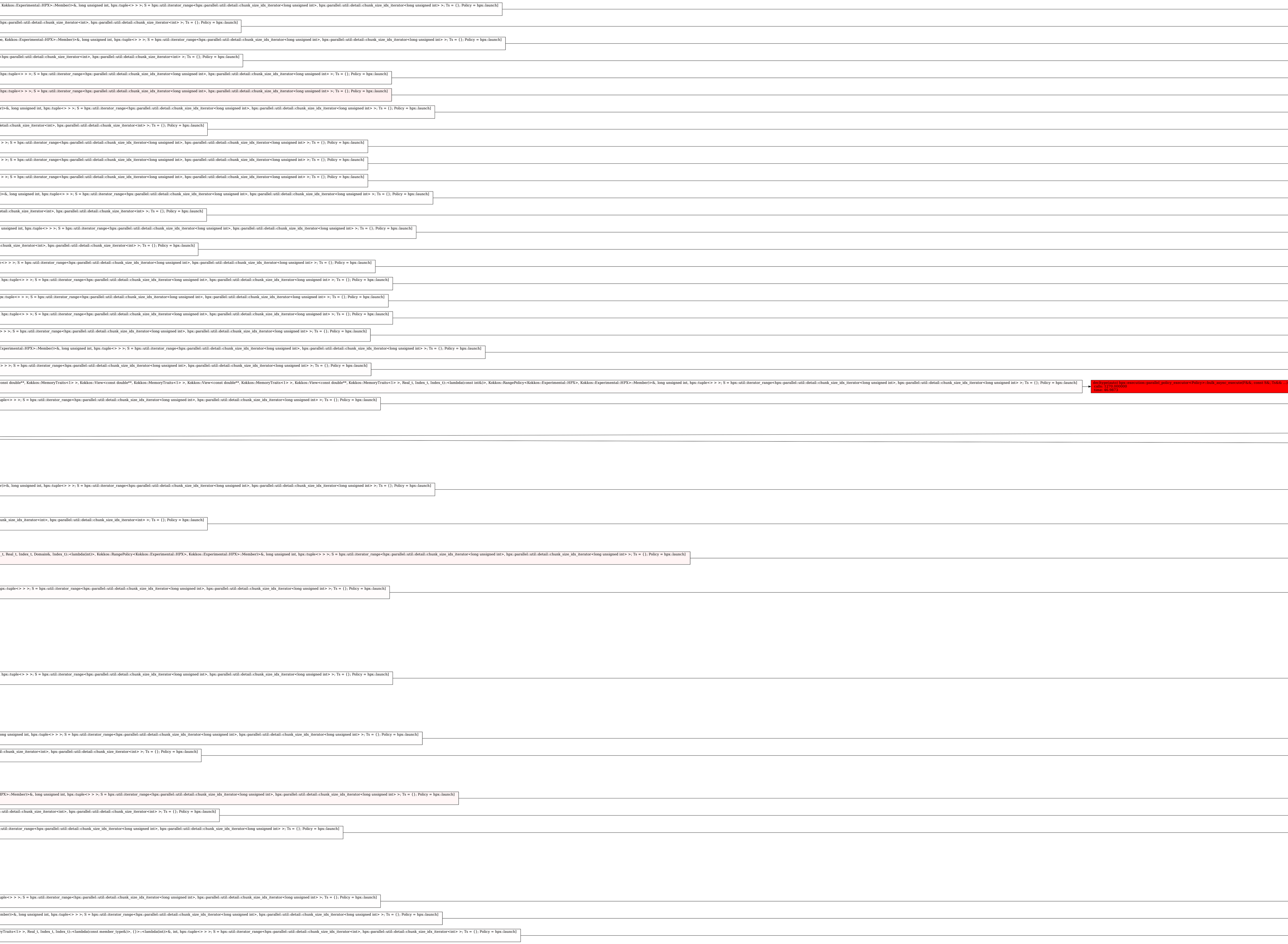
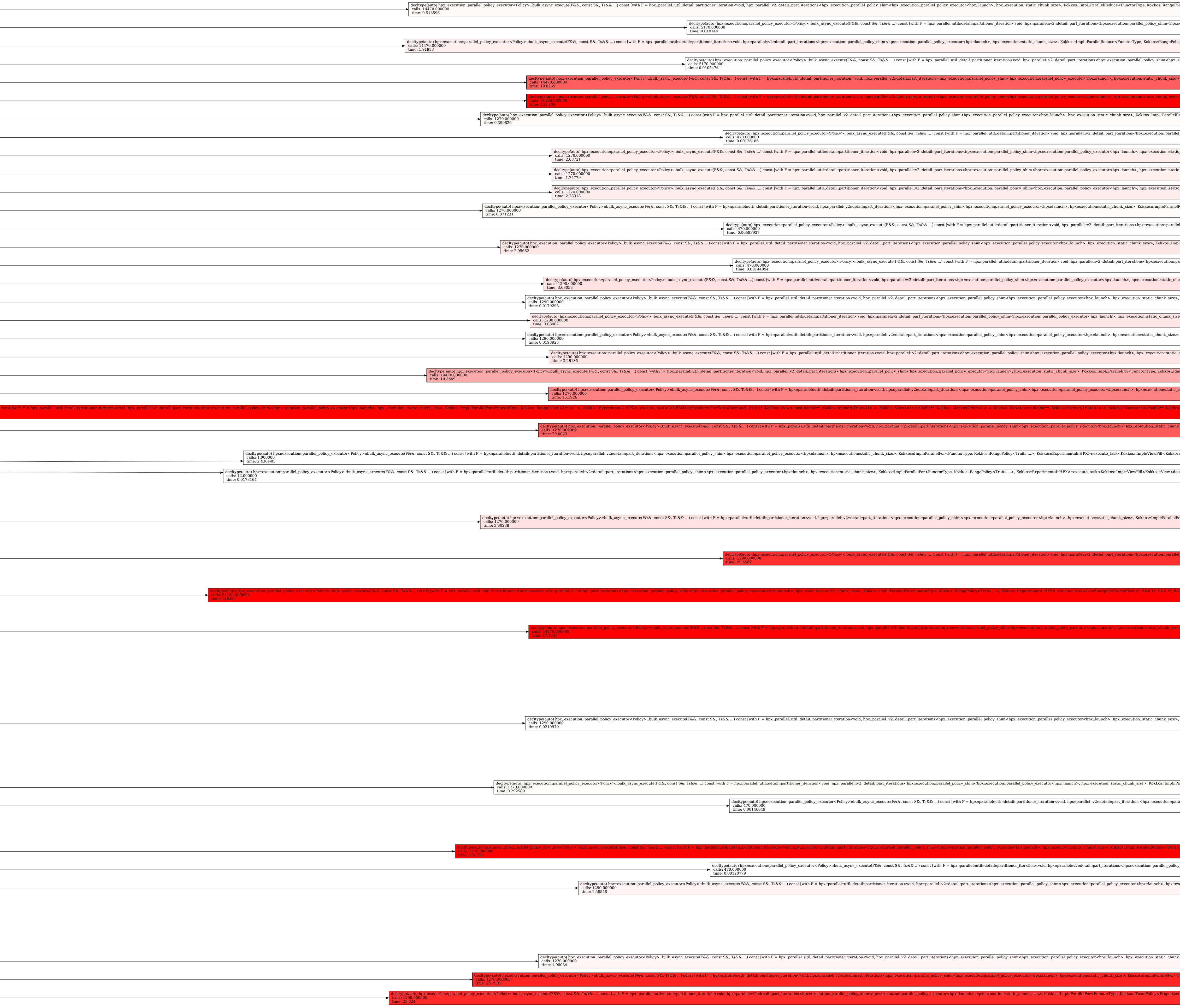
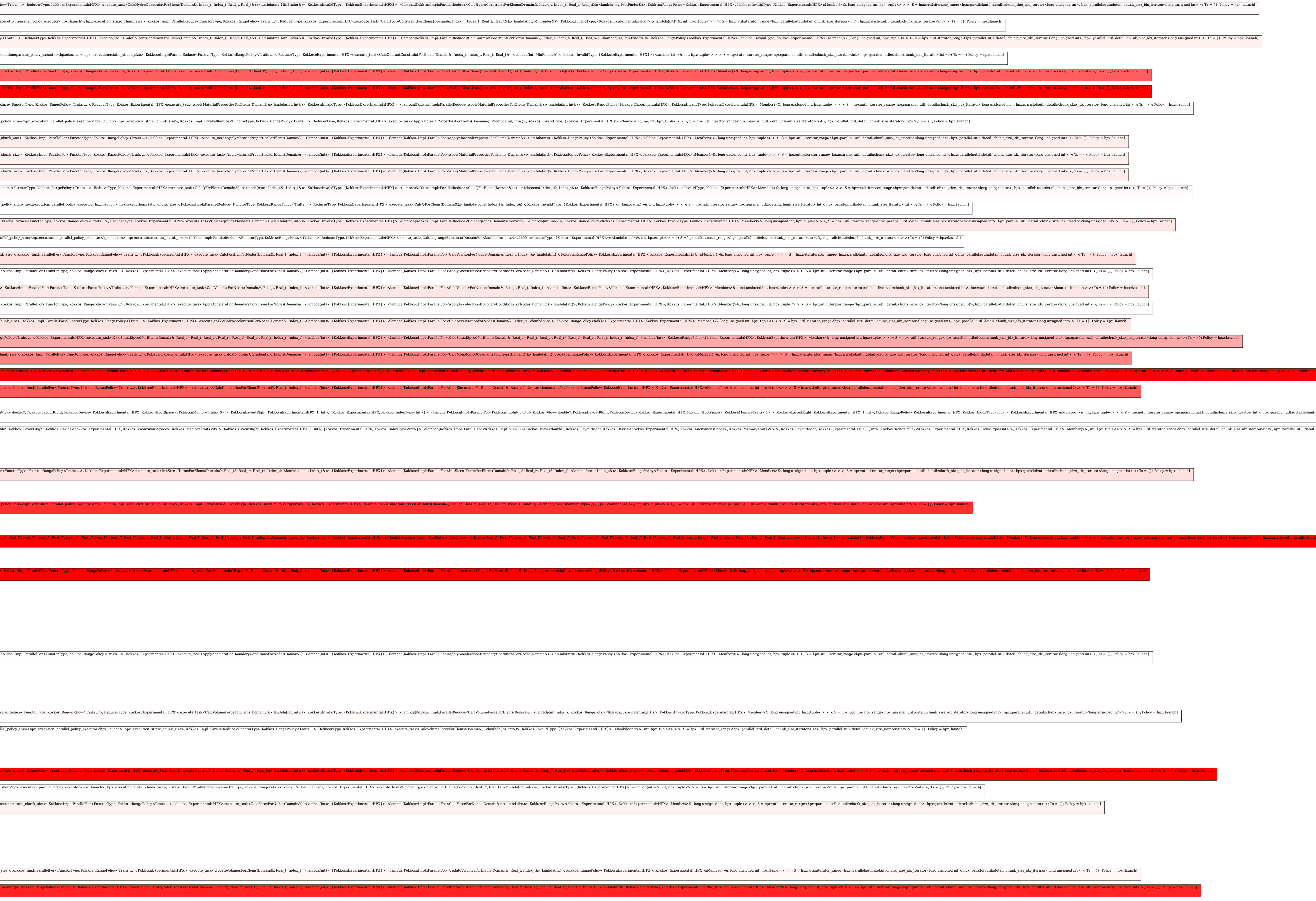
Elapsed Time: 31.1903 seconds
Cores detected: 96
Worker threads observed: 48
Available CPU time: 1497.14 seconds

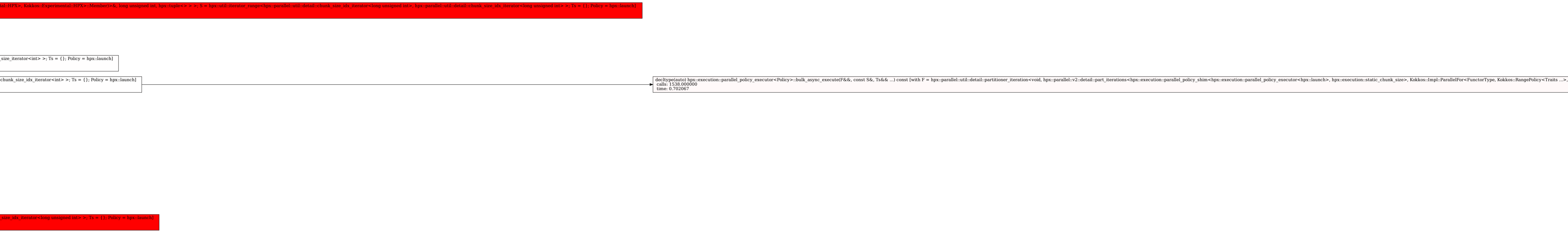

parallel_policy_executor::post calls: 1.000000 time: 6.4389e-05
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::pa calls: 110.000000 time: 0.0898282
Kokkos::parallel_reduce [HPX] ZL27CalcHydroConstraintForElemsR6DomainiidRdEUliR9MinFinderE_ calls: 110.000000 time: 2.30277
declty calls: time:
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::parti calls: 110.000000 time: 0.114395
Kokkos::parallel_reduce [HPX] ZL29CalcCourantConstraintForElemsR6DomainiidRdEUliR9MinFinderE_ calls: 110.000000 time: 0.169927
decltyp calls: 1 time: 0
Kokkos::parallel_for [HPX] EvalEOSForElems F calls: 110.000000 time: 2.6483
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, calls: 110.000000 time: 0.161672
Kokkos::parallel_for [HPX] EvalEOSForElems A calls: 350.000000 time: 6.30481
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, calls: 350.000000 time: 1.79948
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const calls: 10.000000 time: 0.0119948
Kokkos::parallel_reduce [HPX] ZL31ApplyMaterialPropertiesForElemsR6DomainEUliRiE2_ calls: 10.000000 time: 0.024007
Kokkos::parallel_for [HPX] ApplyMaterialPropertiesForElems C calls: 10.000000 time: 0.0606522
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_e calls: 10.000000 time: 0.0303339
Kokkos::parallel_for [HPX] ApplyMaterialPropertiesForElems B calls: 10.000000 time: 0.0521261
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_e calls: 10.000000 time: 0.0226749
Kokkos::parallel_for [HPX] ApplyMaterialPropertiesForElems A calls: 10.000000 time: 0.0742614
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_e calls: 10.000000 time: 0.0450194
Kokkos::parallel_for [HPX] Kokkos::View::initialization [vnewc] via memset calls: 10.000000 time: 0.201728
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) cons calls: 10.000000 time: 0.0122281
Kokkos::parallel_reduce [HPX] ZL13CalcQForElemsR6DomainEUlRKiRiE_ calls: 10.000000 time: 0.0201
Kokkos::parallel_reduce [HPX] ZL20CalcLagrangeElementsR6DomainEUliRiE_ calls: 10.000000 time: 0.0852955
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts& calls: 10.000000 time: 0.0431749
Kokkos::parallel_for [HPX] CalcPositionForNodes calls: 10.000000 time: 0.103776
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execu calls: 10.000000 time: 0.0244842
Kokkos::parallel_for [HPX] ApplyAccelerationBoundaryConditionsForNodes C calls: 10.000000 time: 0.00685742
Kokkos::parallel_for [HPX] CalcVelocityForNodes calls: 10.000000 time: 0.0840767
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, c calls: 10.000000 time: 0.00576871
Kokkos::parallel_for [HPX] ApplyAccelerationBoundaryConditionsForNodes A calls: 10.000000 time: 0.00655409
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&& calls: 10.000000 time: 0.0241832
Kokkos::parallel_for [HPX] CalcAccelerationForNodes calls: 10.000000 time: 0.111823
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, c calls: 10.000000 time: 0.00590588
Kokkos::parallel_for [HPX] CalcSoundSpeedForElems calls: 110.000000 time: 0.35916
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_exe calls: 10.000000 time: 0.0446796
Kokkos::parallel_for [HPX] CalcMonotonicQGradientsForElems calls: 10.000000 time: 0.392482
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util:: calls: 110.000000 time: 0.145213
Kokkos deep copy: Host nodeElemCornerList -> Host nodeElemCornerList calls: 1.000000 time: 1.787e-05
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_exe calls: 10.000000 time: 0.161981
Kokkos::parallel_for [HPX] CalcFBHourglassForceForElems A calls: 10.000000 time: 1.37986
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static_chunk_size>, Kokkos::Impl::ParallelFor<FunctorType, Kokkos::RangePolicy<Traits ...>, Kokkos::Experimental::HPX>::execute_task<CalcFBHourglass calls: 10.000000 time: 0.381013
Kokkos::parallel_for [HPX] CalcKinematicsForElems calls: 10.000000 time: 0.511393
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(calls: 10.000000 time: 0.198405
Kokkos deep copy: Host -> Host calls: 35.000000 time: 8.1268e-05
Kokkos deep copy: Host Scalar -> Host calls: 13.000000 time: 0.0376751
Kokkos::parallel_for [HPX] Kokkos::ViewCopy-1D calls: 126.000000 time: 0.000432559
Kokkos::parallel_for [HPX] Kokkos::View::initialization [regElemlist::entries] via memset calls: 1.000000 time: 0.00747273
APEX MAIN calls: 1.000000 time: 31.1903
Kokkos::parallel_for [HPX] InitStressTermsForElems calls: 10.000000 time: 0.0986395
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const calls: 10.000000 time: 0.0557962
Kokkos::parallel_for [HPX] Kokkos::View::initialization [m_nodeElemStart] via memset calls: 1.000000 time: 0.00857236
Kokkos::parallel_for [HPX] IntegrateStressForElems B calls: 10.000000 time: 0.775136
Kokkos::parallel_for [HPX] Kokkos::ViewCopy-2D calls: 1.000000 time: 4.047e-05
Kokkos::parallel_for [HPX] CalcEnergyForElems calls: 350.000000 time: 3.75108
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx:: calls: 350.000000 time: 1.25148
Kokkos::parallel_for [HPX] Kokkos::View::initialization [regElemlist::row_map] via memset calls: 1.000000 time: 4.489e-06
Kokkos::parallel_for [HPX] CalcMonotonicQRegionForElems calls: 110.000000 time: 1.2166
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, calls: 110.000000 time: 0.326192
Kokkos deep copy: Host regElemlist::row_map -> Host regElemlist::row_map calls: 1.000000 time: 9.8e-07
Kokkos::parallel_for [HPX] Kokkos::View::initialization [nodeElemCount] via memset calls: 1.000000 time: 0.00807314
Kokkos::parallel_for [HPX] Kokkos::View::initialization [determ] via memset calls: 10.000000 time: 0.126046
Kokkos::parallel_for [HPX] Kokkos::View::initialization [] via memset calls: 127.000000 time: 1.912
Kokkos::parallel_for [HPX] ApplyAccelerationBoundaryConditionsForNodes B calls: 10.000000 time: 0.00682134
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, c calls: 10.000000 time: 0.00601358
Kokkos deep copy: Host m_nodeElemStart -> Host m_nodeElemStart calls: 1.000000 time: 1.06e-06
run_helper calls: 1.000000 time: 0.000508817
Kokkos::parallel_for [HPX] Kokkos::View::initialization [nodeElemCornerList] via memset calls: 1.000000 time: 0.0586749
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& .. calls: 10.000000 time: 0.0129531
Kokkos::parallel_reduce [HPX] ZL23CalcVolumeForceForElemsR6DomainEUliRiE_ calls: 10.000000 time: 0.020726
Kokkos::parallel_for [HPX] Kokkos::View::initialization [regBinEnd] via memset calls: 1.000000 time: 2.69e-06
Kokkos deep copy: Host regElemlist::entries -> Host regElemlist::entries calls: 1.000000 time: 1.236e-05
Kokkos::parallel_for [HPX] Kokkos::View::initialization [sigxx] via memset calls: 10.000000 time: 0.161739
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hp calls: 10.000000 time: 1.06466
Kokkos::parallel_reduce [HPX] ZL28CalcHourglassControlForElemsR6DomainPddEUliRiE_ calls: 10.000000 time: 3.30563
Kokkos::parallel_for [HPX] CalcForceForNodes calls: 10.000000 time: 0.0565557
decltype(auto) hpx::execution::parallel_policy_executor<Policy>: calls: 10.000000 time: 0.0292239
Kokkos::parallel_for [HPX] Kokkos::View::initialization [Buffer] via memset calls: 2.000000 time: 1.35266
Kokkos::parallel_for [HPX] Kokkos::View::initialization [sigyy] via memset calls: 10.000000 time: 0.141308
Kokkos::parallel_for [HPX] Kokkos::View::initialization [sigzz] via memset calls: 10.000000 time: 0.12998
Kokkos::parallel_for [HPX] UpdateVolumesForElems calls: 10.000000 time: 0.037201
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(calls: 10.000000 time: 0.0170762
Kokkos::parallel_for [HPX] IntegrateStressForElems A calls: 10.000000 time: 0.726627
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [wi calls: 10.000000 time: 0.214227
Kokkos::parallel_for [HPX] CalcFBHourglassForceForElems B calls: 10.000000 time: 0.798016
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_it calls: 10.000000 time: 0.0945221


110.000000
0.023003
110.000000
0.023655
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execu
calls: 10.000000
time: 0.00228535
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::exec
calls: 10.000000
time: 0.00233857
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::
calls: 10.000000
time: 0.00259272
Kokkos::parallel_for [HPX] Kokkos::ViewFill-1D
calls: 13.000000
time: 0.0373743
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execu
calls: 10.000000
time: 0.0822682
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::ex
calls: 10.000000
time: 0.0024471
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::p
calls: 10.000000
time: 0.00246861


Kokkos::Experimental::HPX>::Member)>&, long unsigned int, hpx::tuple<> > >; S = hpx::util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int>, hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int> >; Ts = {}; Policy = hpx::launch]
hpx::parallel::util::detail::chunk_size_iterator<int>, hpx::parallel::util::detail::chunk_size_iterator<int> >; Ts = {}; Policy = hpx::launch]
e, Kokkos::Experimental::HPX>::Member)>&, long unsigned int, hpx::tuple<> > >; S = hpx::util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int>, hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int> >; Ts = {}; Policy = hpx::launch]
<hpx::parallel::util::detail::chunk_size_iterator<int>, hpx::parallel::util::detail::chunk_size_iterator<int> >; Ts = {}; Policy = hpx::launch]
hpx::tuple<> > >; S = hpx::util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int>, hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int> >; Ts = {}; Policy = hpx::launch]
hpx::tuple<> > >; S = hpx::util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int>, hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int> >; Ts = {}; Policy = hpx::launch]
r)>&, long unsigned int, hpx::tuple<> > >; S = hpx::util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int>, hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int> >; Ts = {}; Policy = hpx::launch]
etail::chunk_size_iterator<int>, hpx::parallel::util::detail::chunk_size_iterator<int> >; Ts = {}; Policy = hpx::launch]
> >; S = hpx::util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int>, hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int> >; Ts = {}; Policy = hpx::launch]
> >; S = hpx::util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int>, hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int> >; Ts = {}; Policy = hpx::launch]
> >; S = hpx::util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int>, hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int> >; Ts = {}; Policy = hpx::launch]
)>&, long unsigned int, hpx::tuple<> > >; S = hpx::util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int>, hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int> >; Ts = {}; Policy = hpx::launch]
etail::chunk_size_iterator<int>, hpx::parallel::util::detail::chunk_size_iterator<int> >; Ts = {}; Policy = hpx::launch]
unsigned int, hpx::tuple<> > >; S = hpx::util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int>, hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int> >; Ts = {}; Policy = hpx::launch]
chunk_size_iterator<int>, hpx::parallel::util::detail::chunk_size_iterator<int> >; Ts = {}; Policy = hpx::launch]
e<> > >; S = hpx::util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int>, hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int> >; Ts = {}; Policy = hpx::launch]
hpx::tuple<> > >; S = hpx::util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int>, hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int> >; Ts = {}; Policy = hpx::launch]
px::tuple<> > >; S = hpx::util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int>, hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int> >; Ts = {}; Policy = hpx::launch]
hpx::tuple<> > >; S = hpx::util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int>, hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int> >; Ts = {}; Policy = hpx::launch]
> > >; S = hpx::util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int>, hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int> >; Ts = {}; Policy = hpx::launch]
Experimental::HPX>::Member)>&, long unsigned int, hpx::tuple<> > >; S = hpx::util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int>, hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int> >; Ts = {}; Policy = hpx::launch]
> > >; S = hpx::util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int>, hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int> >; Ts = {}; Policy = hpx::launch]
const double**, Kokkos::MemoryTraits<1> >, Kokkos::View<const double**, Kokkos::MemoryTraits<1> >, Kokkos::View<const double**, Kokkos::MemoryTraits<1> >, Kokkos::View<const double**, Kokkos::MemoryTraits<1> >, Real_t, Index_t, Index_t)::<lambda(const int&)>, Kokkos::RangePolicy<Kokkos::Experimental::HPX>, Kokkos::Experimental::HPX>::Member)>&, long unsigned int, hpx::tuple<> > >; S = hpx::util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int>, hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int> >; Ts = {}; Policy = hpx::launch]
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...)
calls: 1270.000000
time: 46.9873
uple<> > >; S = hpx::util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int>, hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int> >; Ts = {}; Policy = hpx::launch]
r)>&, long unsigned int, hpx::tuple<> > >; S = hpx::util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int>, hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int> >; Ts = {}; Policy = hpx::launch]
unk_size_idx_iterator<int>, hpx::parallel::util::detail::chunk_size_idx_iterator<int> >; Ts = {}; Policy = hpx::launch]
_t, Real_t, Index_t, Domain&, Index_t)::<lambda(int)>, Kokkos::RangePolicy<Kokkos::Experimental::HPX>, Kokkos::Experimental::HPX>::Member)>&, long unsigned int, hpx::tuple<> > >; S = hpx::util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int>, hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int> >; Ts = {}; Policy = hpx::launch]
px::tuple<> > >; S = hpx::util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int>, hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int> >; Ts = {}; Policy = hpx::launch]
hpx::tuple<> > >; S = hpx::util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int>, hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int> >; Ts = {}; Policy = hpx::launch]
ong unsigned int, hpx::tuple<> > >; S = hpx::util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int>, hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int> >; Ts = {}; Policy = hpx::launch]
il::chunk_size_iterator<int>, hpx::parallel::util::detail::chunk_size_iterator<int> >; Ts = {}; Policy = hpx::launch]
HPX>::Member)>&, long unsigned int, hpx::tuple<> > >; S = hpx::util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int>, hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int> >; Ts = {}; Policy = hpx::launch]
:util::detail::chunk_size_iterator<int>, hpx::parallel::util::detail::chunk_size_iterator<int> >; Ts = {}; Policy = hpx::launch]
:util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int>, hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int> >; Ts = {}; Policy = hpx::launch]
uple<> > >; S = hpx::util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int>, hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int> >; Ts = {}; Policy = hpx::launch]
mber)>&, long unsigned int, hpx::tuple<> > >; S = hpx::util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int>, hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int> >; Ts = {}; Policy = hpx::launch]
ryTraits<1> >, Real_t, Index_t, Index_t)::<lambda(const member_type&)>, {}>::<lambda(int)>&, int, hpx::tuple<> > >; S = hpx::util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<int>, hpx::parallel::util::detail::chunk_size_idx_iterator<int> >; Ts = {}; Policy = hpx::launch]


decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static_chunk_size>, Kokkos::Impl::ParallelReduce<FunctorType, Kokkos::RangePol
calls: 14470.000000
time: 0.513596
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::e
calls: 5170.000000
time: 0.010144
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static_chunk_size>, Kokkos::Impl::ParallelReduce<FunctorType, Kokkos::RangePolicy
calls: 14470.000000
time: 1.91983
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::e
calls: 5170.000000
time: 0.0105476
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static_chunk_size>,
calls: 14470.000000
time: 19.6269
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static_chunk_size>,
calls: 51160.000000
time: 255.309
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static_chunk_size>, Kokkos::Impl::ParallelRe
calls: 1270.000000
time: 0.399626
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel
calls: 470.000000
time: 0.00126186
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static
calls: 1270.000000
time: 2.08721
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static
calls: 1270.000000
time: 1.74779
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static
calls: 1270.000000
time: 2.28318
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static_chunk_size>, Kokkos::Impl::ParallelR
calls: 1270.000000
time: 0.371231
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel
calls: 470.000000
time: 0.00583937
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static_chunk_size>, Kokkos::Impl
calls: 1270.000000
time: 2.95662
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::pa
calls: 470.000000
time: 0.00144094
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static_chun
calls: 1290.000000
time: 3.63053
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static_chunk_size>,
calls: 1290.000000
time: 0.0179295
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static_chunk_size
calls: 1290.000000
time: 3.03407
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static_chunk_size>,
calls: 1290.000000
time: 0.0193923
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static_c
calls: 1290.000000
time: 3.26135
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static_chunk_size>, Kokkos::Impl::ParallelFor<FunctorType, Kokkos::Ran
calls: 14470.000000
time: 10.3549
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static_c
calls: 1270.000000
time: 15.1926
const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static_chunk_size>, Kokkos::Impl::ParallelFor<FunctorType, Kokkos::RangePolicy<Traits ...>, Kokkos::Experimental::HPX>::execute_task<CalcHourglassForceForElems(Domain&, Real_t*, Kokkos::View<const double**, Kokkos::MemoryTraits<1> >, Kokkos::View<const double**, Kokkos::MemoryTraits<1> >, Kokkos::View<const double**, Kokkos::MemoryTraits<1> >, Kokkos::View<const double*, Kokkos
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static_chunk
calls: 1270.000000
time: 20.0023
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static_chunk_size>, Kokkos::Impl::ParallelFor<FunctorType, Kokkos::RangePolicy<Traits ...>, Kokkos::Experimental::HPX>::execute_task<Kokkos::Impl::ViewFill<Kokkos:
calls: 1.000000
time: 2.436e-05
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static_chunk_size>, Kokkos::Impl::ParallelFor<FunctorType, Kokkos::RangePolicy<Traits ...>, Kokkos::Experimental::HPX>::execute_task<Kokkos::Impl::ViewFill<Kokkos::View<dou
calls: 12.000000
time: 0.0173164
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static_chunk_size>, Kokkos::Impl::ParallelFo
calls: 1270.000000
time: 3.60238
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel
calls: 1290.000000
time: 25.5562
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static_chunk_size>, Kokkos::Impl::ParallelFor<FunctorType, Kokkos::RangePolicy<Traits ...>, Kokkos::Experimental::HPX>::execute_task<CalcEnergyForElems(Real_t*, Real_t*, Real_t*, Rea
calls: 51160.000000
time: 148.09
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static_chunk_size
calls: 14470.000000
time: 47.1543
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static_chunk_size>,
calls: 1290.000000
time: 0.0219979
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static_chunk_size>, Kokkos::Impl::Pa
calls: 1270.000000
time: 0.292589
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::para
calls: 470.000000
time: 0.00146649
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static_chunk_size>, Kokkos::Impl::ParallelReduce<Functo
calls: 1270.000000
time: 134.592
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy
calls: 470.000000
time: 0.00120779
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::ex
calls: 1290.000000
time: 1.58548
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static_chunk_
calls: 1270.000000
time: 1.08034
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static_chunk_size>, Kokkos::Impl::ParallelFor<F
calls: 1270.000000
time: 26.7985
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static_chunk_size>, Kokkos::Impl::ParallelFor<FunctorType, Kokkos::TeamPolicy<Properties
calls: 1290.000000
time: 25.824




tal::HPX>, Kokkos::Experimental::HPX>::Member)>&, long unsigned int, hpx::tuple<> > >; S = hpx::util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int>, hpx::parallel::util::detail::chunk_size_idx_iterator<long unsigned int> >; Ts = {}; Policy = hpx::launch]
_size_iterator<int> >; Ts = {}; Policy = hpx::launch]
chunk_size_idx_iterator<int> >; Ts = {}; Policy = hpx::launch]
decltype(auto) hpx::execution::parallel_policy_executor<Policy>::bulk_async_execute(F&&, const S&, Ts&& ...) const [with F = hpx::parallel::util::detail::partitioner_iteration<void, hpx::parallel::v2::detail::part_iterations<hpx::execution::parallel_policy_shim<hpx::execution::parallel_policy_executor<hpx::launch>, hpx::execution::static_chunk_size>, Kokkos::Impl::ParallelFor<FunctorType, Kokkos::RangePolicy<Traits ...>,
calls: 1538.000000
time: 0.702067
_size_idx_iterator<long unsigned int> >; Ts = {}; Policy = hpx::launch]

```
Kokkos::Experimental::HPX>::execute_task<Kokkos::Impl::ViewFill<Kokkos::View<double*, Kokkos::LayoutRight, Kokkos::Device<Kokkos::Experimental::HPX, Kokkos::AnonymousSpace>, Kokkos::MemoryTraits<0> >, Kokkos::LayoutRight, Kokkos::Experimental::HPX, 1, int>, {Kokkos::Experimental::HPX, Kokkos::IndexType<int>}>::<lambda(Kokkos::Impl::ParallelFor<Kokkos::Impl::ViewFill<Kokkos::View<double*, Kokkos::LayoutRight, Kokkos::Device<Kokkos::Experimental::HPX, Kokkos::AnonymousSpace>, Kokkos::MemoryTraits<0> >, Kokkos::LayoutRight, Kokkos::Experimental::HPX, 1, int>, Kokkos::RangePolicy<Kokkos::Experimental::HPX, Kokkos::IndexType<int> >, Kokkos::Experimental::HPX>::Member)>&, int, hpx::tuple<> > >; S = hpx::util::iterator_range<hpx::parallel::util::detail::chunk_size_idx_iterator<int>, hpx::parallel::util::detail::chunk_size_idx_iterator<int> >; Ts = {}; Policy = hpx::launch]
```