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Exascale Amr SolvER (ErASER)

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- We're able to ...
  - run the mini-app on  $> 10'000$  cores
  - compile Trilinos with GPU support
  - compile the mini-app with GPU support
- We're planning to ...
  - **get it to run with GPUs**
  - do a performance study of the solver
  - run a 2D/3D Landau damping example  
(challenge: memory usage  $\gg 120$  GB)

- We're able to ...
  - run the mini-app on  $> 10'000$  cores
  - compile Trilinos with GPU support
  - compile the mini-app with GPU support
  - **get it to run with GPUs**
- Performance decrease:
  1. Unnecessary de-/allocs  
(opened ticket <https://github.com/kokkos/kokkos/issues/1831>)
  2. Setting up the matrices with Tpetra-Graph structure isn't enough + AMR library does not return necessary info to do that directly with Kokkos