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# GRChombo: automatic mesh refinement for numerical relativity

*Wednesday, August 12, 2015 2:50 PM (30 minutes)*

In this talk, I will introduce GRChombo: a numerical relativity code which is capable of performing adaptive mesh refinement (AMR) in a fully automated manner. Our code implements the tried-and-tested BSSN/CCZ4 formalisms on top of a modern C++ framework provided by the Chombo AMR library. This allows many problems to be set up much more straightforwardly, whilst still achieving good parallel performance. I will also discuss additional tools which we have recently developed as part of the package and some of the science that we are currently looking at using GRChombo.

**Primary author:** TUNYASUVUNAKOOL, Saran

**Presenter:** TUNYASUVUNAKOOL, Saran

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