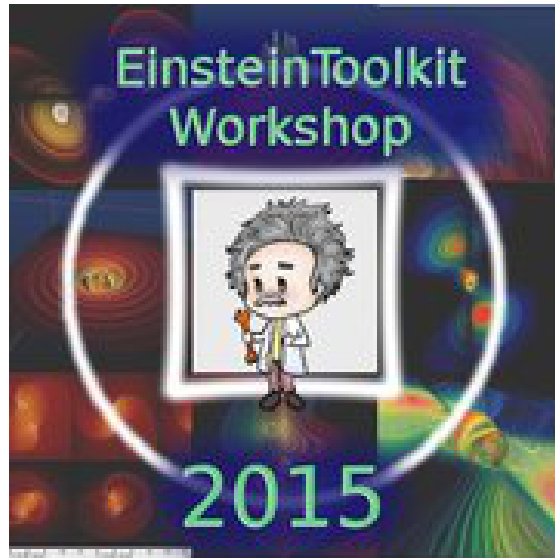


Einstein Toolkit Workshop 2015



Report of Contributions

Contribution ID: **250**

Type: **not specified**

Registration and Welcome

Tuesday, August 11, 2015 1:30 PM (30 minutes)

Contribution ID: 251

Type: **not specified**

Tutorial: introduction to the Einstein Toolkit

Tuesday, August 11, 2015 2:00 PM (4 hours)

Presenters: HINDER, Ian; KOROBKIN, Oleg

Contribution ID: 253

Type: **not specified**

New frameworks for equation of state and postprocessing

Wednesday, August 12, 2015 9:00 AM (30 minutes)

Primary author: KASTAUN, Wolfgang

Presenter: KASTAUN, Wolfgang

Session Classification: GRMHD

Contribution ID: 254

Type: **not specified**

The WhiskyTHC code

Wednesday, August 12, 2015 9:40 AM (30 minutes)

Primary author: RADICE, David

Presenter: RADICE, David

Session Classification: GRMHD

Contribution ID: 255

Type: **not specified**

Overview of the IllinoisGRMHD code (*)

Wednesday, August 12, 2015 10:20 AM (30 minutes)

Primary author: ETIENNE, Zachariah

Presenter: ETIENNE, Zachariah

Session Classification: GRMHD

Contribution ID: 256

Type: **not specified**

Overview of Chemora: high-level framework for hierarchical code generation and optimization

Wednesday, August 12, 2015 11:30 AM (30 minutes)

Primary author: BRANDT, Steven R.

Presenter: BRANDT, Steven R.

Session Classification: Hardware & Software

Contribution ID: 257

Type: **not specified**

Discussion

Wednesday, August 12, 2015 12:00 PM (30 minutes)

Session Classification: Hardware & Software

Contribution ID: 258

Type: **not specified**

Solving punctured multi black hole initial data with finite element method (*)

Wednesday, August 12, 2015 1:30 PM (30 minutes)

Primary author: CAO, Zhoujian

Presenter: CAO, Zhoujian

Session Classification: AMR

Contribution ID: 259

Type: **not specified**

High Order Mesh Refinement for Dynamical Space Times

Wednesday, August 12, 2015 2:10 PM (30 minutes)

Primary author: MONGWANE, Bishop

Presenter: MONGWANE, Bishop

Session Classification: AMR

Contribution ID: 260

Type: **not specified**

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

Session Classification: AMR

Contribution ID: 261

Type: **not specified**

Visualizing Einstein Toolkit Data with yt (*)

Wednesday, August 12, 2015 4:00 PM (30 minutes)

Primary author: MILLER, Jonah

Presenter: MILLER, Jonah

Session Classification: Various

Contribution ID: **262**

Type: **not specified**

New McLachlan code

Wednesday, August 12, 2015 4:40 PM (30 minutes)

Primary author: DIENER, Peter

Presenter: DIENER, Peter

Session Classification: Various

Contribution ID: 263

Type: **not specified**

Plans for fine-grained multi-threading in Cactus to improve efficiency and scalability (*)

Wednesday, August 12, 2015 5:20 PM (30 minutes)

Primary author: SCHNETTER, Erik

Presenter: SCHNETTER, Erik

Session Classification: Various

Contribution ID: 264

Type: **not specified**

Hands-on session on Chemora, a code generation and optimization framework

Friday, August 14, 2015 2:00 PM (4 hours)

Primary author: BRANDT, Steven

Presenter: BRANDT, Steven