



DVR 0065528

# Dynamics of General Relativity: Black holes and Asymptotics

December 10 - 21, 2012 organised by: Lars Andersson, Robert Beig, Mark Heinzle, Sascha Husa

Workshop Schedule, December 11 - 20, 2012

#### Week 1

# • Tuesday, December 11, 2012

**14:00 – 14:55:** Juliette Hell

Anisotropic Einstein data with isotropic nonnegative prescribed scalar curvature

**15:00 – 15:55:** Joao Costa

The problem of a self-gravitating scalar field with positive cosmological constant

#### • Wednesday, December 12, 2012

14:00 - 14:55: Sergio Dain

The wave equation on the extremal Reissner-Nordström black hole

**15:00 – 15:55:** Piotr Bizon

A remark on 'instability' of the extremal Reissner-Nordström black hole

## • Thursday, December 13, 2012

14:00 - 14:55: David Hilditch

Compact binary evolutions in Z4c and constraint preserving boundary conditions

15:00 - 15:55: Stephen Lau

Towards implicit-explicit simulations of blackholes

## • Friday, December 14, 2012

11:30 - 12:30: István Rácz

On the existence of parallelly propagated curvature singularities along the null generators of non-extremal event horizons of distorted black hole configurations

**14:00 – 14:55:** Harald Pfeiffer

Binary black hole simulations: status and recent advances

**15:00 – 15:55:** Jeremie Joudioux

Hertz potentials and the decay of massless fields

#### Week 2

## • Monday, December 17, 2012

14:00 - 14:55: Helmuth Friedrich

A formal expansion of purely radiative vacuum solutions at past timelike infinity

15:00 – 15:55: Maciej Maliborski

Dynamics of a Yang-Mills field in the Einstein cosmos

## • Tuesday, December 18, 2012

14:00 - 14:55: Olivier Sarbach

Initial-boundary value formulations for Einstein's field equations

15:00 - 15:55: Anil Zenginoglu

Green functions and caustic echoes from black holes

## • Wednesday, December 19, 2012

11:30 – 12:30 Mikolaj Korzynski

Cubic black hole lattices: initial data and evolution

**14:00 – 14:55:** Vincent Moncrief

Constrained propagation of spherically symmetric Einstein-Yang-Mills Fields out of Scri

15:00 - 15:55: Gerhard Rein

Equilibrium configurations of self-gravitating matter distributions

## • Thursday, December 20, 2012

11:30 - 12:30: Gerhard Schäfer

Dynamics of binary systems in Hamiltonian general relativity

All lectures take place at the ESI Boltzmann Lecture Hall