



Csizmadia Peti utolsó szakmai prezentációja a Fiatal Csillagász és Asztrofizikus Kutatók Találkozója 2009 workshopon hangzott el 2009 szeptember 2-án.

5<sup>th</sup> WORKSHOP OF  
YOUNG RESEARCHERS  
IN ASTRONOMY AND ASTROPHYSICS

Budapest, 2-4 September, 2009

ABSTRACT BOOK



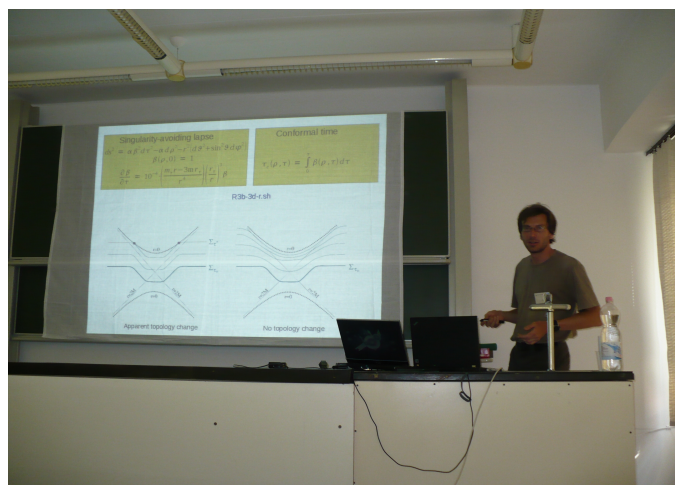
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## Numerical examination of gravitational collapses

A numerical framework is introduced for the simulation of spherically symmetric gravitating systems. As opposed to conventional approaches, our new framework makes it possible to follow time evolution after the appearance of trapped surfaces, more importantly, until the physical singularities are reached. We investigate the possibility of topology change. Penrose's weak cosmic censorship hypothesis is also tested numerically, as well as the blow-up and critical exponents of curvature scalars, in 3 different spacetime topologies.



Invitation for conference organisers

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