

Session Program

24-26 Sept 2020

**Virtual Conference of the Polish Society on
Relativity 2020**

Mathematical and Numerical Relativity

Thursday 24 September

10:10

Mathematical and Numerical Relativity

Session

10:10–10:35 **On the Einstein flow in 2+1 dimensions**

Speaker

David Fajman

10:35–11:00 **Quasi-local energy and Oppenheimer-Snyder collapse**

Speaker

Naqing Xie

11:00–11:25 **Nonlinear metric perturbations and their applications**

Speaker

Andrzej Rostworowski

11:25–11:40 **Gravitational dynamics in the Higgs-dark matter sector**

Speaker

Anna Nakonieczna

11:40–11:55 **The small sphere limits of quasilocal masses in higher dimensions**

Speaker

Jinzhao Wang

11:55–12:10

Conformal fields and integrals of motion in pp waves and electromagnetic fields

Speaker

Krzysztof Andrzejewski

12:10–12:25

Non-singular Kerr-NUT-(anti-)de Sitter spacetimes with projectively non-singular horizons

Speaker

Maciej Ossowski

12:25–12:40 **Quasi-local mass of weak gravitational field**

Speaker

Piotr Waluk

12:40–12:55 **General Relativistic Shock Waves that Induce Cosmic Acceleration**

Speaker

Christopher Alexander

12:55–13:15

UNIQUE REGULAR INTERIOR SOLUTION FOR THE SLOWLY ROTATING KERR BLACK HOLE

Speaker

Pawel Mazur

13:15