## Fakultät für Physik Gravitationsphysik

A-1090 WIEN, BOLTZMANNGASSE 5, AUSTRIA



## EINLADUNG

Lunchseminar zum Vortrag von

## Sk Jahanur Hoque

(Prague)

über

"Conserved charges in asymptotically de Sitter spacetimes"

## **Abstract:**

We discuss the different notions of charges for asymptotically de Sitter space-time. We present a covariant phase space construction of hamiltonian generators of asymptotic symmetries with 'Dirichlet' boundary conditions in de Sitter spacetime, extending a previous study of J\"ager. We show that the de Sitter charges so defined are identical to those of Ashtekar, Bonga, and Kesavan (ABK). We then present a comparison of ABK charges with other notions of de Sitter charges. We compare ABK charges with counterterm charges, showing that they differ only by a constant offset, which is determined in terms of the boundary metric alone. We also compare ABK charges with charges defined by Kelly and Marolf at spatial infinity of de Sitter spacetime. When the formalisms can be compared, we show that the two definitions agree.

Zeit: Montag, 25.11.2019, 13.00 h

**Ort**: Arbeitsgruppe Gravitation, Währinger Straße 17, Common room, first floor

gez.: P. T. Chrusciel, D. Fajman