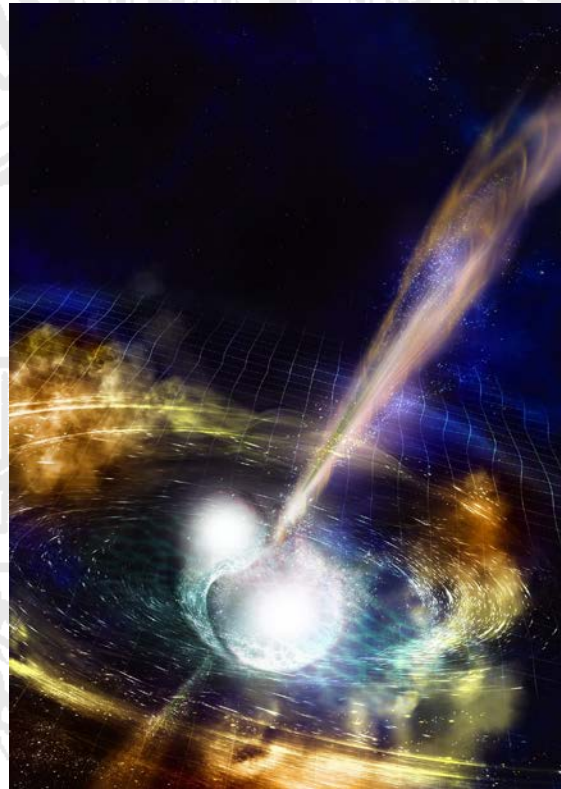


# PHYSIKALISCHES KOLLOQUIUM

AM 9. JULI 2018 UM 17 UHR C.T.

IM GROßEN HÖRSAAL



## **MULTI-MESSENGER ASTRONOMY WITH GAMMA RAYS AND GRAVITATION WAVES**

PROF. DR. OLAF REIMER  
*INSTITUT FÜR ASTRO- UND TEILCHENPHYSIK  
UNIVERSITÄT INNSBRUCK*

The binary neutron star inspiral event GW170817 broke new ground in astrophysics. Barely 2 seconds after the cataclysmic gravitational wave (GW) event, the Fermi Gamma-ray Space Telescope detected the short Gamma-ray Burst GRB170817A. Extensive counterpart studies across the electromagnetic spectrum allowed to reveal the corresponding host galaxy and connect to the rich phenomenology of a kilonova. The wealth of information received before and after the GW event allowed conclusion about a variety of models and theories, elevating GW170817 = GRB170817A as the best studied transient event of cosmological nature ever.