

# Großes Physikalisches Kolloquium an der Universität zu Köln

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University of Regensburg



## *Faster than a cycle of light*

**09.01.2018**  
16<sup>45</sup> Uhr / HS III



Latest progress in ultrafast optics allows us to accelerate electrons in solids directly by the carrier wave of light. A fascinating quantum world unfolds on the sub-optical-cycle scale, including Bloch oscillations, quasiparticle collisions, and high-harmonic generation. By combining this approach with ultramicroscopy we take the first femtosecond snapshot image of a molecular orbital and the first femtosecond single-molecule movie.

