



**TUM-IAS Focus Workshop** 

## Hot Carrier Dynamics in Advanced Concept Solar Cells

Munich-Garching, Germany October 28-29, 2019



**Scope:** The aim of this two-day interactive workshop is to bring together leading international scientists working in the field of "*Hot carrier dynamics in advanced concept solar cells*". Specific emphasis is placed on theoretical and experimental understanding of nonequilibrium carrier relaxation dynamics in low-dimensional semiconductor nanostructures and their exploitation for novel hot carrier type solar cells. Hereby, investigations and manipulation of ultrafast electron-phonon interactions as well as multi-exciton generation dynamics in a variety of nanostructured materials (quantum wells, dots, wires, perovskites, etc.) will be discussed. The meeting provides a unique forum for both theoretical and experimental researchers to interact at the interface between multiscale modelling, engineering of sophisticated low-dimensional semiconductor materials, and ultrafast optical spectroscopy.

**Location:** This workshop will take place at the Institute for Advanced Study (www.tumias.de) on the Garching campus of the Technical University of Munich.

**Scientific program:** ~20 keynote talks will be presented by invited speakers drawn from leading groups across Europe, US and Asia-Pacific, complemented by presentations from local groups. A poster session will complete the program. An overview of the program and preliminary list of speakers can be found on the conference website: http://www.wsi.tum.de/views/hot-carrier-dynamics.php

Travel support: Financial travel support will be provided by the TUM-IAS

Organizers: G. Koblmüller/J. J. Finley (TUM), M. C. Beard (NREL), S. M. Goodnick (ASU),