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中国科学院上海硅酸盐研究所高性能陶瓷和超微结构国家重点实验室

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Ultrafast Spectroscopy of Electronic Dynamics in Nanostructures

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时间：2023 年 6 月 19 日（星期一）下午 2:00-4:00

地点：嘉定园区 F 楼 5 楼第一会议室

欢迎广大科研人员和研究生参与讨论！

联系人：陈立东（69163505）

Abstract:

We apply a set of ultrafast spectroscopies to investigate details of charge carrier dynamics in various nanostructures. We present results on hot electron cooling in 2D perovskites and quantum dots, plexiton dynamics in hybrid states of strongly coupled plasmonic metal nanoparticles and molecular aggregates. Finally, we summarize our recent results on strong light-matter interaction in microcavities. The results will be presented in context of envisioned future applications.

Keywords: coherent spectroscopy, perovskite nanostructures, hot carrier cooling, plexitons

Biography

Tõnu Pullerits obtained his PhD from the Institute of Physics at Tartu University, Estonia, in 1991. He pursued his postdoc work in Free University of Amsterdam (1992–1993), Umeå University (1993–1994). He moved to Lund University 1994 where he is currently full professor and head of the Division of Chemical Physics. He is an elected member of the Royal Swedish Academy of Sciences since 2016. His research interests include energy transport in molecular systems, ultrafast charge carrier dynamics and photophysics in photovoltaic materials, and coherent multidimensional spectroscopy.

