Halide perovskite solar cells are presently the forerunner of solution-processed photovoltaic technologies with certified efficiencies exceeding 23%. In this talk, I will review the meteoric rise of perovskite solar cells in a matter of 10 years to efficiencies that took the ubiquitous Si solar cells more than 5 decades to achieve. I will distill the novel photophysics of the workhorse methyl-ammonium lead tri-iodide (CH$_3$NH$_3$PbI$_3$) perovskite system and highlight our latest efforts in harnessing its slow hot-carrier cooling properties. Opportunities and challenges in developing hot-carrier extraction and multi-exciton generation for next-generation perovskite photovoltaics will also be discussed.

14 May 2019 (Tuesday)
4:30 pm - 6 pm
SPMS Lecture Theatre 5
SPMS-03-08 (map)

Admission is free.
Snacks will be served from 4 pm.