



复旦大学物理系 物质科学报告

Time: 2:00pm, Tuesday, 2019.5.14

Location: Room C108, Jiangwan Physics Building

Full quantum nature of water on salt surface

Enge Wang

International Center for Quantum Materials and School of Physics,
Peking University
&
Institute of Physics, Chinese Academy of Sciences

Despite water being a ubiquitous substance, it is surprising that some basic questions are still debated. Here using a combination of experimental (cryogenic STM) and theoretical (first-principle electronic structures and molecular dynamics) methods, we systematically studied the unusual structure and dynamics of water molecules on NaCl surface. More interestingly, for the first time, we observe the full quantum effect and magic number hydrates in water system. These results shed light on our understanding of water at atomic scale.



Enge Wang is the Professor of Physics, Peking University. He is also the Chairman of Advisor Board of Institute of Physics and the Honorary Director of Kavli Institute of Theoretical Sciences, Chinese Academy of Sciences. He was the Director of the Institute of Physics, the Provost and President of Peking University, and the Vice President of Chinese Academy of Sciences from 1999 to 2017. He was selected as the Vice President of the International Union of Pure and Applied Physics (IUPAP) in 2017 and the International Councilor of American Physical Society (APS) in 2018. He researches condensed matter physics; the approach is a combination of theoretical and experimental study of light-element materials.

