



# 学术报告

**题目** : Proton Dynamics in Ice VII

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**时间** : 3:00PM, Friday, Nov. 24

**地点** : Room 221

**Abstract** : Recently, Bove et al. have found a supporting evidence for the existence of concerted proton quantum tunneling along hydrogen bonds in ice Ih using neutron incoherent quasi-elastic scattering measurement. Since the tunneling barriers are controlled by the oxygen-oxygen distance or the external pressure, study of pressure effect on the proton quantum tunneling will be important. In this presentation, we discuss pressure effect, its physical consequences, and verification methods of this phenomenon as well as its relation to the previous experimental and theoretical studies.

**Profile** : Prof. Toshiaki Iitaka received a PhD in Physics in 1990 from Waseda University, and then he did postdoctoral research work at Weizmann Institute of Science (Israel) and Riken (Japan). Afterwards, he became Senior Research Scientist at Computational Astrophysics Laboratory and Computational Engineering Applications Unit, and joined to the iTHES group (Interdisciplinary Theoretical Science Research Group) at Riken. Since 2016, he is the leader of the Sub-project "Materials in deep earth and planets" in Post-K project (Japan's flagship supercomputer project).

