



# 第6回トポロジカル物質科学セミナー Topological Material Science Seminar (6)

## **Weyl semi-metal: a new topological state in condensed matter**

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**Place: 2nd Lecture Room (Rm 363), Grad. School of Science Bldg.  
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Department of Physics, Graduate School of Science,  
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**Date: January 28 (Thursday), 2016**

**Time: 13:30-**

Abstract:

Weyl semi-metal (WSM) is a new topological state found recently in condensed matter. In this talk I will introduce the first experimentally observed WSM material TaAs family. I will show that the Weyl points in TaAs family can be derived from the topological invariances defined in some special planes in the  $k$  space. After that I will also introduce the main physical properties associated with such exotic quantum state including the Fermi arcs on the surface, the negative MR induced by chiral anomaly and the chiral magnetic effect.