



Solid State Institute  
המכון למצב מוצק

TECHNION  
Israel Institute  
of Technology



הטכניון  
מכון טכנולוגי  
לישראל

SEMINAR

סמינר

## Multiple ground states of the transition-metal dichalcogenide TaS<sub>2</sub>

*Prof. Amit Kanigel*

Department of Physics  
Technion

### Abstract

Low dimensional materials have been a major subject of interest in recent years. In particular, the transition metal dichalcogenides (TMDs), quasi-2D layered materials with weak van der Waals coupling between layers, received a lot of attention. TMDs exhibit strong electron-electron and electron-phonon interactions that lead to complicated phase diagrams showing a variety of ground states.

In this talk I will describe the different types of TaS<sub>2</sub>. I will show evidence of a quantum spin liquid state in 1T-TaS<sub>2</sub> and of topological superconductivity in 4Hb-TaS<sub>2</sub>.

\*Refreshment at 12:15

\*כיבוד ב-12:15

**\*ההרצאה תתקיים ביום רביעי, ה-6.11.19 בשעה 12:30\***  
באודיטוריום המכון למצב מוצק, קומת כניסה

**The lecture will take place on Wednesday, 6.11.19 at 12:30\***  
**at the Solid State Institute auditorium, entrance floor**

Host: Assistant Professor Yoav Sagi