

## CMT/CMS seminar

**Date & Time:** June 26th 14:00-15:00  
**Place:** 8F large seminar rm, Sengen main bldg  
**Speaker:** Dr. Yoshihiko Takano  
Group Leader, Nano Frontier Materials Group, NIMS  
高野義彦グループリーダー  
NIMS超伝導線材ユニットナノフロンティア材料G

**Title:**

How to make the 11-group iron-based superconductors superconducting:  
a recipe

鉄系超伝導体11系に超伝導を発現させるためのレシピ

**Abstract:**

FeSe and FeTe are two parent phases of the 11-group iron-based superconductors. The former exhibits superconductivity while the latter does not, and becomes instead an antiferromagnet. What causes this difference? What brings on the superconductivity? I shall try to answer this question in light of our experimental results, among which is the enhancement of superconducting properties upon immersing in alcoholic beverages.

11系の母相にはFeSeとFeTeがある。FeSeは超伝導であり、FeTeは反強磁性体で超伝導を示さない。この違いは何から来るのか？酒アニールを含め様々な取り組みを行った結果をまとめてお話しします。

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