

## 第4回 TRIAC セミナーのご案内

第4回 TRIAC セミナーを以下の要領で開催致します。奮って御参加下さい。

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**講演題目** Idea for Polarized Solid  $^{131}\text{Xe}$  for T violation  
Experiment in Neutron Transmission  
**講演者** Prof. William Michael Snow (Indiana University)  
**日時** 2006年12月18日(月) 13:15 ~ 15:00  
**場所** 日本原子力研究開発機構  
先端基礎交流棟3階 第2センター会議室

### 講演要旨

Searches for new sources of T violation beyond the Standard Model in the first generation of quarks appear to be needed to explain the baryon asymmetry of the universe. The T violation experiment under development at KEK using polarized neutron transmission through polarized targets such as  $^{139}\text{La}$  and  $^{131}\text{Xe}$  which have large parity violation at neutron resonances, needs (1) large polarized targets, (2) ways to monitor the neutron polarization in the target to avoid false effects. I will describe recent advances in the production of polarized  $^{129}\text{Xe}$  for medical imaging using spin-exchange optical pumping and ideas to use scintillation light from polarized neutron captures in the polarized xenon target which may help the experiment. The medical imaging goal of 40%  $^{129}\text{Xe}$  polarization at rate of 120 bar-liter/second could also be interesting for experiments in other areas of nuclear/particle physics.

\* 講演は英語で行なわれます。

### 連絡先

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