

## **Electronic structures of magnetic materials**

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Synchrotron radiation becomes an essential tool for studying electronic and magnetic properties of spintronic materials. In collaboration with the experimental groups using synchrotron radiation, we have investigated electronic structures and magnetic properties of several magnetic systems. I will present some of our recent results in connection with the MCD, XAS, RPES, and SPEM studies:

- (i) Origin of the giant magnetic moment of Fe impurity on/in Cs film,
- (ii) Electronic structures of  $R\text{Te}_2$  ( $R=\text{La}, \text{Ce}$ ): a clue to the pressure-induced superconductivity,
- (iii) Electronic structures of electron-doped CMR perovskites:  
 $\text{La}_{0.7}\text{Ce}_{0.3}\text{MnO}_3$  and  $\text{Ba}_{2-x}\text{La}_x\text{FeMoO}_6$ ,
- (iv) Spatial Chemical Inhomogeneity and Local Electronic Structure of Mn-doped Ge Ferromagnetic Semiconductor,
- (v) Magnetic polaronic clustered phase in  $\text{Eu}_{1-x}\text{La}_x\text{B}_6$ .