## X-ray nonlinear absorption and emission processes (+ Discussion)

Tuesday, 19 May 2015 11:05 (45 minutes)

I will present our recent results on nonlinear absorption and emission processes obtained at SACLA. As for the absorption, I will present two-photon absorption experiment and discuss requirements to perform X-ray two-photon absorption spectroscopy. In the emission process, I will show that the fluorescence decay channel is controllable with intense X-rays, and discuss the theoretical background. Finally, I will explain our requests for the XFEL beam to perform more advanced X-ray nonlinear experiments.

Presenter: Dr TAMASAKU, Kenji (RIKEN SPring-8 Center)