


Science and Technology in Japan (June 23rd, 2020 - July 2nd, 2020)

Lecturer Profile and Abstract of Lecture & Field Trip

Cooling atoms with light	
Date: June 24th	Lecturer: TACHIKAWA Maki
<p>Abstract of Lecture: Laser cooling is a technique in quantum optics and atomic physics that slows down gaseous atoms, lowering their temperature below 1 mK. This lecture explains how irradiation of light cools atoms instead of heating them, and introduces interesting new physics brought by laser cooling. Ultracold atoms behave differently from classical atoms to exhibit wave nature and a new state of matter. Laser cooling also benefits metrology as a key technique for atomic clocks.</p>	
Field Trip: Laboratory tour may be arranged after the lecture.	
	<p>TACHIKAWA Maki, Professor of Physics, Meiji University 1989: Ph.D. degree, Department of Physics, The University of Tokyo 1987-1997: Research Associate, Department of Physics, The University of Tokyo 1994-1997: Guest Researcher, National Institute of Standards and Technology (USA) 1997-2003: Associate Professor, Department of Physics, Meiji University 2003-present: Professor, Department of Physics, Meiji University</p>