

MDプログラム QE1スケジュール 2019.8.30 MDプログラム講義室

発表時間:15分、質疑応答:23分

	学生		所属 専攻	指導教員	テーマ名	テーマの領域	テーマ説明
11:00- 11:40	GURU Deepika	M2b	理学 物理学専攻	岩佐直仁	A Monte Carlo Simulation of $9\text{Be}(3\text{He}, \alpha)8\text{Be}^*(p)7\text{Li}$ Reaction Experiment in Relation with the Cosmological Lithium Problem	原子核物理	A Monte Carlo simulation of $9\text{Be}(3\text{He}, \alpha)8\text{Be}^*(p)7\text{Li}$ reaction experiment conducted at JAEA was carried out using Geant4. In order to understand the influence of recoil of beryllium-8 in the CM frame, 2-body relativistic kinematics was implemented along with a Gaussian distribution in the beam spread. Legendre coefficients, consequently double differential cross sections, were obtained by fitting the intensities from the simulation with the data from the experiment in the Lab frame.
11:40- 12:20	SU Yixin 蘇 怡心	M2b	工学 知能デバイス材料 学専攻	久保百司	Reactive Molecular Dynamics Simulations on Effect of Interfacial Structure of Carbon Nanotube/Alumina Composite on Its Mechanical Properties	計算材料学	Alumina exhibits high stiffness and high-temperature stability, although brittleness limits their applications. Adding carbon nanotubes (CNTs) may provide a solution, yet previous experiments reported uncertainty in the reinforcement of alumina with CNT. In this study, we use reactive molecular dynamics simulation to clarify the mechanisms of CNTs reinforcing CNT/alumina composite.