

タイトル: High Temperature Plasma Diagnostics

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対象 : 大学院学生(修士、博士)
For master students and Ph.D. students

場所 : 総合理工学府H棟 (先端エネルギー理工学専攻棟) 2階講義室
Lecture Room on 2F in H building

Abstract

Plasma diagnostics play an essential role in the development of fusion energy. This lecture series will start with a basic introduction to fusion and then explain various diagnostics from basic principles and how they are used to diagnose a hot plasma. The diagnostics covered will include magnetic probes, electric probes, refractive index measurements, Thomson scattering, electron cyclotron emission, heavy ion beam probe, charge exchange spectroscopy, x-ray imaging crystal spectrometer and bolometer. Finally a brief introduction to tomographic techniques and applications will be given.

Schedule

5/15 (Wednesday)

#1: 14:50-16:20 Introduction to Fusion Part I

5/16 (Thursday)

#2: 10:30-12:00 Introduction to Fusion Part II

#3: 13:00-14:30 Magnetic and Electric Probes

#4: 14:50-16:20 Refractive Index Measurements

5/17 (Friday)

#5: 10:30-12:00 Thomson Scattering, ECE, HIBP, CXS, XICS

#6: 13:00-14:30 Bolometry

#7: 14:50-16:20 Tomography