

集中講義（1単位：1credit）

M3906：先端エネルギー理工学特別講義第六

タイトル: High Temperature Plasma Diagnostics

講師：Professor Byron J. Peterson
National Institute for Fusion Science

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

Schedule

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|----|--------------|--|
| #1 | 7/18 (Wed.) | 10:30-12:00 |
| #2 | 7/18 (Wed.) | 14:50-16:20 |
| #3 | 7/19 (Thur.) | 10:30-12:00 |
| #4 | 7/19 (Thur.) | 13:00-14:30 |
| #5 | 7/19 (Thur.) | 14:50-16:20 |
| #6 | 7/20 (Fri.) | 10:30-12:00* (H building 3F room no.310) |
| #7 | 7/20 (Fri.) | 14:50-16:20 |

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.