

**PhD in “Fusion Science and Engineering”
Università di Padova - Napoli “Federico II”**

Call for admission to the PhD courses 2020/21 (XXXVI cycle)

Research Topics

| n. | Topic Description |
|-----------|---|
| 1 | Core plasma transport and integrated scenarios |
| 2 | MHD stability and control |
| 3 | Edge plasma physics and power exhaust |
| 4 | Neutral Beam Injector (NBI) physics and technologies |
| 5 | Heating and Current Drive (HCD) physics and technologies |
| 6 | Plasma diagnostics physics, interpretation and technologies |
| 7 | Theoretical and numerical plasma physics |
| 8 | Low temperature plasmas physics and technologies |
| 9 | Electromagnetic modeling for design and control of fusion devices |
| 10 | Design of electrical and mechanical components for fusion devices |
| 11 | Electrical technologies, circuits and systems for fusion devices |
| 12 | Technologies for Control, Data Access and Communication (CODAC) |
| 13 | Design of plasma controllers for fusion devices |
| 14 | Vacuum and high-voltage technologies |
| 15 | Studies of energy scenarios including fusion |

Contact persons

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