



**Centro Brasileiro de Pesquisas Físicas**

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## **PCP0181 – “FUNCTIONAL INTEGRAL”** **(32h/aula – 2 créditos)**

**MATÉRIA LECIONADA:**

In the course we will give an introduction to renormalization group techniques and study several applications from Condensed Matter physics.

**Topics:**

- 1d Ising model
- ferromagnetic transition
- Kondo problem
- Kosterlitz-Thouless transition
- disordered magnets
- sigma models

**Refs.:**

- **A. Altland and B. Simons, "Condensed Matter Field Theory"**
- **[E. Fradkin](#), "Field Theories of Condensed Matter Physics"**
- **S. Sachdev, "[Quantum Phase Transitions](#)"**