



Symposium : Magnetic and Superconducting Materials

Scope of the Symposium

The symposium is intended to bring together scientists and engineers interested in all aspects of experimental and theoretical research in magnetic and superconducting materials, as well as in their technological applications. Contributions are expected in topics ranging from basic properties to recent developments in magnetism and superconductivity at nanoscale. Emphasis will be given on new materials, properties and devices.

Abstracts will be solicited in (but not limited to) the following areas

- *Fundamental magnetic properties; Hard and soft magnetic materials and applications*
- *Magnetism in nanoparticles, nanowires, films, multilayers and other nanostructured materials; Magnetic semiconductors; Magnetism in carbon-based materials*
- *Micromagnetism*
- *Magnetization dynamics and magnetization processes in magnetic materials*
- *Nontrivial spin textures, stripe domains, vortices, skyrmions and other chiral structures*
- *Spintronics in metals semiconductors and topological insulators; spin dependent transport*
- *Magnetocaloric materials and multiferroics*
- *Applied magnetism and instrumentation; non-destructive magnetic measurements; biomedical applications, magnetic recording*
- *Superconductors*
- *Spin and charge excitations in superconductors; Interaction between magnetism and superconductivity*

Tentative list of invited speakers (To be confirmed)

Tim Mewes (*The University of Alabama*) **Julian Geshev** (*UFRGS*) **Durval Rodrigues Junior** (*EEL USP*) .

Symposium Organizers

Felipe Bohn (*UFRN*) **Joo Paulo Sinnecker** (*CBPF*) **Rubem Luis Sommer** (*CBPF*) **Edimilson Felix da Silva** (*UFRN*) .

<https://sbpmat.org.br/19encontro>

XIX Brazil MRS Meeting