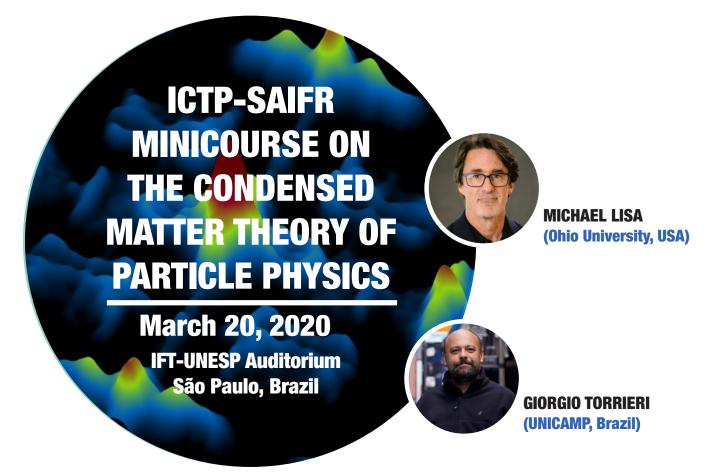


ICTPInternational Centre for Theoretical PhysicsSAIFRSouth American Institute for Fundamental Research



A historical introduction will be presented on how statistical mechanics has been used to understand the production of particles in hadronic collisions where perturbation theory appears to fail. The Fermi and Landau models will be described and shown to lead to Hagedorn's derivation of a limiting temperature where hadronic physics breaks down. Our modern understanding of deconfinement and quark gluon plasma will then be described, and there will be a discussion of the search for deconfined matter in heavy ion collisions. The current status of our understanding and open problems will conclude this minicourse.

There is neither registration fee nor registration form, and everybody is welcome to participate.

More information: http://www.ictp-saifr.org/cmtpp2020



ORGANIZER Ana Mizher (IFT-UNESP, Brazil) ICTP-SAIFR STEERING COMMITTEE Carlos Brito Cruz - FAPESP scientific director Atish Dabholkar - ICTP director Luiz Davidovich - Brazil Acad. Science president Peter Goddard - Search Committee chair Juan Maldacena - Representing South America Fernando Quevedo - ICTP former director Sandro Valentini - UNESP rector ICTP-SAIFR SCIENTIFIC COUNCIL Michael Green (chair) - Univ. of Cambridge Rosario Fazio - ICTP representative Marcelo Yamashita - IFT-UNESP director Marcel Clerc - U. de Chile André de Gouvêa - Northwestern U. Eduardo Fradkin - U. Illinois Gabriela Gonzalez - LIGO, Louisiana State U. Belita Koiller - UFJ, Rio de Janeiro Luis Lehner - Perimeter I., Waterloo Gabriel Mindlin - U. de Buenos Aires ICTP-SAIFR STAFF Nathan Berkovits - Director Rogerio Rosenfeld - Vice-Director Pedro Vieira - Perimeter-SAIFR Coordinator Jandira Oliveira - Executive Manager Humberto Neto - Executive Secretary Sebastião Neto - Computer Systems Manager Lilia Faria - Financial Manager Malena Stariolo - Science Journalist Isabela Pereira - Technical assistant