

Symposium Strong-Interaction Matter under Extreme Conditions (SYEC)

jointly organized by
the Hadronic and Nuclear Physics Division (HK) and
the Gravitation and Relativity Division (GR)

Lorenz von Smekal
Justus-Liebig-Universität Gießen
Institut für Theoretische Physik
Heinrich-Buff-Ring 16
35392 Gießen
lorenz.smekal@theo.physik.uni-giessen.de

Bernhard Ketzer
Rheinische Friedrich-Wilhelms-Universität Bonn
Helmholtz-Institut für Strahlen- und Kernphysik
Nussallee 14-16
53115 Bonn
bernhard.ketzer@uni-bonn.de

Bernd Brügmann
Friedrich-Schiller-Universität Jena
Theoretisch-Physikalisches Institut
Fröbelstieg 1
07743 Jena
bernd.bruegmann@uni-jena.de

Among the fundamental forces of Nature it is the strong interaction that predominates the properties of matter at temperatures as extreme as they have prevailed during the first microseconds after the Big Bang. In astrophysics, the greatest extremes of temperature and density occur during neutron-star mergers. And in the laboratory, extremes of temperature and density can be generated and studied in heavy-ion collisions.

This symposium covers topics ranging from the underlying theory of strong-interaction matter, Quantum Chromodynamics, as studied with large-scale simulations, to the exploration of its properties with heavy-ion collision experiments in the laboratory, and from astrophysical observations in the Universe.

Overview of Invited Talks and Sessions

(Lecture hall HBR 14: HS 1)

Invited Talks

SYEC 1.1	Wed	9:00– 9:45	HBR 14: HS 1	Strong-interaction Matter under Extreme Conditions: a Review — ●GUY D. MOORE
SYEC 1.2	Wed	9:45–10:30	HBR 14: HS 1	Theory of Strong-Interaction Matter — ●GERGELY ENDRODI
SYEC 2.1	Wed	11:00–11:45	HBR 14: HS 1	Unravelling the phase structure of strong-interaction matter with high-energy heavy-ion experiments — ●TETYANA GALATYUK
SYEC 2.2	Wed	11:45–12:30	HBR 14: HS 1	Neutron star mergers in numerical relativity — ●MASARU SHIBATA

Sessions

SYEC 1.1–1.2	Wed	9:00–10:30	HBR 14: HS 1	Strong-Interaction Matter under Extreme Conditions I
SYEC 2.1–2.2	Wed	11:00–12:30	HBR 14: HS 1	Strong-Interaction Matter under Extreme Conditions II