

Symposium Geometric Paradigms in Modern Physics (SYGP)

jointly organized by
 Gravitation and Relativity Division (GR),
 History of Physics Division (GP)
 Theoretical and Mathematical Physics Division (MP)
 Low Temperature Physics Division (TT), and
 the Working Group on Philosophy of Physics (AGPhil)

Domenico Giulini
 ZARM Bremen and
 Institute for Theoretical Physics
 Leibniz University Hannover
 Appelstraße 2
 30167 Hannover
 giulini@itp.uni-hannover.de

Henning Rehren
 Institute for Theoretical Physics
 Georg-August-Universität Göttingen
 Friedrich-Hund-Platz 1
 37077 Göttingen
 rehren@theorie.physik.uni-
 goettingen.de

Dennis Lehmkuhl
 Bergische Universität Wuppertal
 Interdisziplinäres Zentrum für
 Wissenschafts- und
 Technikforschung
 Gaußstraße 20
 dennis.lehmkuhl@uni-wuppertal.de

This year we celebrate the centennial of Einstein's theory of General Relativity. The idea of this symposium is to highlight the role of geometric ideas in different branches of modern physics and to relate these to the original as well as modern formulation of General Relativity. As is well known, many developments in modern field theories refer more or less directly to concepts we associate with, or have learned from, General Relativity and its geometric interpretation. We wish to explore in more detail the impact and success of such geometric concepts in various directions and to what extent this reference to General Relativity is helpful and truly justified.

Overview of Invited Talks and Sessions

(Lecture room: H 0105)

Invited Talks

SYGP 1.1	Thu	15:00–15:30	H 0105	General relativity: a theory born in creative confusion — ●HARVEY BROWN
SYGP 1.2	Thu	15:30–16:00	H 0105	Gravitating Non-Abelian Fields: Solitons and Black Holes — ●JUTTA KUNZ
SYGP 1.3	Thu	16:00–16:30	H 0105	Geometric principles in the physics of topological matter — ●ALEXANDER ALTLAND
SYGP 1.4	Thu	16:30–17:00	H 0105	General Covariance in Quantum Field Theory on Curved Spacetimes — ●THOMAS-PAUL HACK
SYGP 1.5	Thu	17:00–17:30	H 0105	The (noncommutative) Geometry of the Standard Model of Particle Physics — ●CHRISTOPH STEPHAN

Sessions

SYGP 1.1–1.5	Thu	15:00–17:30	H 0105	Geometric paradigms in modern physics
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