

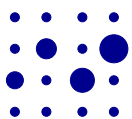
GEOMETRIC STRUCTURES ON MANIFOLDS AND THEIR APPLICATIONS

CASTLE RAUISCHHOLZHAUSEN, JULY 1-7, 2012



Organizers: Ilka Agricola (Universität Marburg)
Anna Maria Fino (University of Torino)
Andrew Dancer (University of Oxford)
Nigel Hitchin (University of Oxford)

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Geometric structures on manifolds and their applications

Castle Rauischholzhausen, July 1-7, 2012

Programme

Monday, July 2

- 9:00-09:50 Wolfgang Ziller (University of Pennsylvania)
Constructing polar manifolds from their isotropy groups
– coffee break –
- 10:30-11:20 Megan Kerr (Wellesley College)
Homogeneous spaces with nonnegative curvature
- 11:30-12:10 Luigi Vezzoni (University of Torino)
The Calabi-Yau equation for T^2 -fibrations
– lunch break –
- 14:00-14:50 Laura Barberis (University of Cordoba)
Abelian complex structures and related geometries
- 15:00-15:40 Thomas Madsen (University of Aarhus)
Half-flat structures on $S^3 \times S^3$
– coffee break –
- 16:20-17:00 Richard Cleyton (University of Southern Denmark)
Riemannian geometries with parallel torsion
- 17:10-17:50 Christof Puhle (Humboldt Universität zu Berlin)
 G -structures on 8-manifolds

Tuesday, July 3

- 9:00-09:50 Marco Gualtieri (University of Toronto)
Holomorphic Poisson structures in generalized complex geometry
– coffee break –
- 10:30-11:20 Roger Bielawski (University of Leeds)
Pluricomplex geometry and quaternionic manifolds
- 11:30-12:10 Takumi Yokota (Universität Münster)
A refinement of a gap theorem for gradient shrinking Ricci solitons
– lunch break –
- 14:00-14:50 Frederik Witt (Universität Münster)
A variational principle for spinors
- 15:00-15:40 Hwajeong Kim (Hannam University)
Twistorial eigenvalue estimates for Dirac operators with torsion
– coffee break –
- 16:20-17:00 Nadine Große (Universität Leipzig)
Invertible Dirac operators and handle attachments on manifolds with boundary
- 17:10-17:50 Ivan Minchev (Sofia University)
Quaternionic contact hypersurfaces of hyper-Kähler manifolds

Wednesday, July 4

- 09:00-09:50 McKenzie Wang (McMaster University)
Gradient Ricci Solitons of Cohomogeneity One
– coffee break –
- 10:30-11:20 Bruce Gilligan (University of Regina)
Holomorphic Reductions of Pseudoconvex Homogeneous Manifolds
- 11:30-12:10 Ian Hambleton (McMaster University)
Gauge theory and smooth group actions on 4-manifolds
– lunch break / free afternoon (coffee will be served) –

Thursday, July 5

- 09:00-09:50 Burkhard Wilking (Universität Münster)
On a generalization of Gromov's almost flat manifold theorem
– coffee break –
- 10:30-11:20 David Calderbank (University of Bath)
H-projective structures and their applications
- 11:30-12:10 Simon Chiossi (Politecnico di Torino)
Riemannian 4-manifolds with small holonomy
– lunch break –
- 14:00-14:50 Andreas Arvanitoyeorgos (University of Patras)
Recent progress on homogeneous Einstein metrics on generalized flag manifolds
- 15:00-15:40 Svjetlana Terzic (University of Montenegro)
Geometric formality of some homogeneous spaces
– coffee break –
- 16:20-17:00 Rafael Torres (University of Oxford)
Construction of generalized complex structures in dimension 4
- 17:10-18:00 Carolyn Gordon (Dartmouth College)
Sound-alike manifolds and their geometry

Friday, July 6

- 09:00-09:50 Jorge Lauret (University of Cordoba)
The Ricci flow and its solitons for homogeneous manifolds and the Alekseevskii conjecture
– coffee break –
- 10:30-11:20 Guofang Wang (Universität Freiburg)
Sasaki Ricci flow
- 11:30-12:10 Cynthia Will (University of Cordoba)
On the diagonalization of the Ricci flow on Lie groups
– lunch break –

- 14:50-14:40 John C. Wood (University of Leeds)
Harmonic maps into exceptional symmetric spaces
- 14:50-15:30 Christina Tønnesen-Friedmann (Union College New York)
Extremal Sasakian geometry on the product of a Riemann surface with S^3
– coffee break –
- 15:50-16:30 Owen Dearnicott (University of California)
 n -Sasakian reduction
- 16:50 bus departure

Participants

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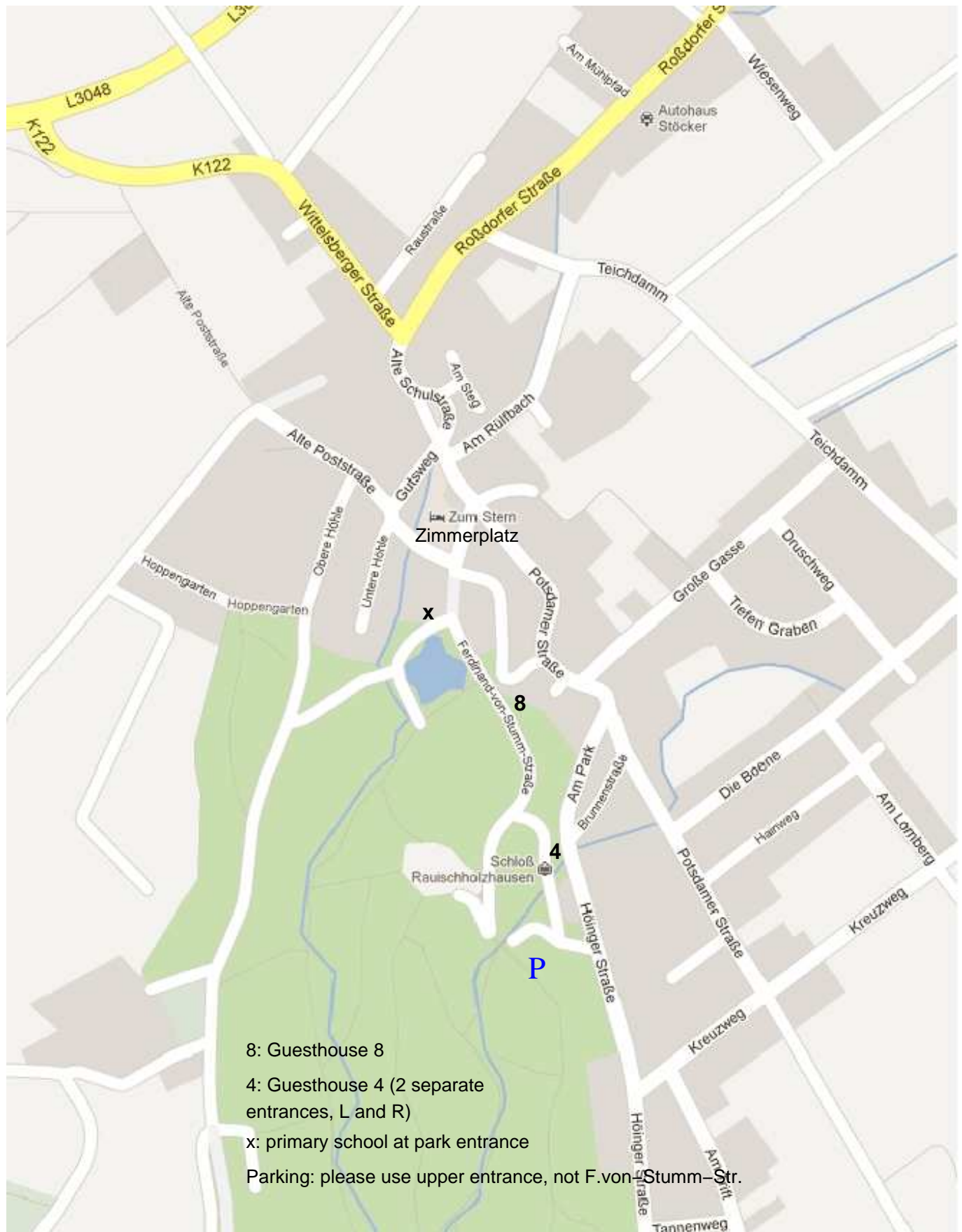
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Local map (Rauschholzhausen)



Useful addresses in Rauischholzhausen:

Sparkasse Marburg-Biedenkopf (bank with ATM machines)
Potsdamer Str. 12, 06424 / 928008

Schloss-Apotheke (pharmacy)
Wittelsberger Str. 1, 06424 / 3575

Hofladen Duske (farm market)
open Tue and Fr 4 pm – 6:30 pm and upon appointment
Potsdamer Str. 7, 06424 / 70207
www.biolandhof-duske.de

Edeka-Markt (supermarket)
Große Gasse 2

Taxis:

normal taxis: Taxi Brunett (06421 / 880099), Taxi-Sorany (06421 / 484444).
taxi with fixed price (usually cheaper): Telecar Marburg (06421 / 25100)

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Local map (downtown Marburg)

