## Review Panel in Cologne, January 15 + 16, 2009 Schedule

## Presentations on Thursday, January 15, 2009:

9.00 - 9.15 Bliem, Köln

Polyhedral models of representation

9.15 - 9.30 Brunat, Bochum

Finite reductive groups and arithmetic properties of representations modulo the defining characteristic

9.30 - 9.45 Bürgisser, Paderborn

Geometry and representation theory in computational complexity

9.45 - 10.00 Chen, Bonn

Gabriel-Roiter measure for finite dimensional algebras

10.00 - 10.15 Christandl, München

Representation Theory of the Unitary and Symmetric Group with a view towards the Quantum Marginal Problem

10.15 - 10.30 Ebeling, Hannover

Homological mirror symmetry for Singularities

10.30 - 11.00 coffee break

(in "Dozentenzimmer" in the Main Building (Hauptgebäude) of the University of Cologne)

11.00 - 11.15 Eick, Braunschweig / Müller, Aachen

Lie Algebras and their Representations: Algorithms and Data Libraries

11.15 - 11.30 Farnsteiner, Bielefeld

Combinatorial and geometric aspects of the representation theory of finite group schemes

11.30 - 11.45 Fiebig, Freiburg

Critical level representations of affine Kac-Moody algebras and the geometric Langlands program

11.45 - 12.00 Fuchs, Göttingen

Locally symmetric spaces and cyclic homology

12.00 - 13.00 lunch break

(Room behind "EG Süd" in Zentralmensa (Canteen), Zülpicher Str. 70, 50937 Köln)

13.00 - 13.15 Gramlich, Darmstadt

Representations of unitary forms

13.15 - 13.30 Green, Jena

The Oliver conjectures in the theory of p-local finite groups

13.30 - 13.45 Hartmann, Aachen

Representations of Algebraic Groups in Differential and Difference Galois Theory

13.45 - 14.00 Heinzner, Bochum

Complex geometry of actions and related representations

14.00 - 14.15 Hilgert, Paderborn

Branching laws for 1-parameter families of representations of Lie groups and their asymptotic behavior

14.15 - 14.30 Hille I, Münster

Actions of Algebraic Groups, Fans and Tilting Modules

14.30 - 14.45 Hille II, Münster

Strongly Exceptional Sequences of Line Bundles on Toric Varieties and Representation Theory

14.45 - 15.15 coffee break

(Dozentenzimmer)

15.15 - 15.30 Hiß I, Aachen

Investigations on Alperin's weight conjecture through Hecke algebras

15.30 - 15.45 Hiß II, Aachen / Malle I, Kaiserslautern

Investigations on the conjectures of McKay and Alperin-McKay

15.45 - 16.00 Holm, Hannover

Cluster-categories, clustertilted algebras and derived equivalences

16.00 - 16.15 Kimmerle, Stuttgart

Representation Rings and Arithmetical Properties of Finite Groups

16.15 - 16.30 Neeb, Darmstadt

Semibounded unitary representations of double extensions of infinite dimensional pre-Hilbert-Lie groups

16.30 - 16.45 Soergel, Freiburg

Koszul duality in representation theory

16.45 - 17.00 Littelmann, Köln

Coordinator's proposal

## Presentations on Friday, January 16, 2009

9.00 - 9.15 Knop, Erlangen Multiplicity Free Actions

9.15 - 9.30 Krause, Paderborn

The telescope conjecture for derived categories arising in representation theory

9.30 - 9.45 Kühlshammer, Jena

Hecke algebras, ring extensions and blocks

9.45 - 10.00 Ladkani, Bonn

Derived categories of sheaves over finite partially ordered sets and their homological properties

10.00 - 10.15 Littelmann, Köln

Geometry and the compression of combinatorial formulas for Macdonald polynomals

10.15 - 10.30 Malle II, Kaiserslautern

Structure and representation of cyclotomic Hecke algebras

10.30 - 11.00 coffee break (Dozentenzimmer)

11.00 - 11.15 Mozgovoy, Wuppertal

Non-commutative crepant resolutions and their DT invariants

11.15 - 11.30 Koenig, Köln

Homological structures at the interface of abstract representation theory and algebraic Lie theory

11.30 - 11.45 Nebe, Aachen

p-adic group rings of finite groups

11.45 - 12.00 Penkov, Bremen

Structure and representation of of infinite- and finite dimensional Lie algebras

12.00 - 13.00 lunch break (Mensa)

13.00 - 13.15 Perling, Bochum

Toric structures of exceptional sequences and representations of algebras

13.15 - 13.30 Plesken, Aachen

Algebraic group techniques for finite(ly presented) groups

13.30 - 13.45 Röhrle I, Bochum

Serre's notion of complete reducibility and geometric invariant theory

13.45 - 14.00 Röhrle II, Bochum

Deformations of singularities and Representation of finite W-algebras

14.00 - 14.15 Schick, Göttingen

Equivariant K-homology for p-adic groups

14.15 - 14.45 coffee break (Dozentenzimmer)

14.45 - 15.00 Schweigert, Hamburg

Representation theoretic tools for equivariant and orbifold conformal field theories

15.00 - 15.15 Stroppel, Bonn

Combinatorics of affine Grassmannians and affine flag varieties

15.15 - 15.30 Wedhorn, Paderborn

Purity of stable pieces in compactifications of semisimple groups