



# Fondation Francqui-Stichting

Fondation d'Utilité Publique - Stichting van Openbaar Nut

## ***Homological Geometry - The mathematics behind non-commutative geometry***

***(Hotel le Méridien, Brussels October 22 to 24, 2004)***

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### *Programme*

#### **Friday 22 October, 2004**

08.30 : Welcome **Mark Eyskens**, Chairman of the Francqui Foundation, Minister of State

08.50 : General Introduction & Welcome Professor **Michel Van den Bergh**

Chairman : Professor **Michel Van den Bergh** (FWO, LUC, VUB, Belgium)

09.00 – 9.50 Professor **Maxim Kontsevich**, Institut des Hautes Etudes Scientifiques, Bures-sur-Yvette-France - *A convenient class of triangulated categories*

09.55-10.45 Professor **Victor Ginzburg**, University of Chicago, Department of Mathematics, USA - *Non-commutative geometry and preprojective algebras*

10.45-11.15 **Coffee**

11.15-12.05 Professor **Mikhail Kapranov** (Yale University, Department of Mathematics, New Haven-USA - *Semi-infinite cohomology of Ind-schemes*

12.15-13.30 **Lunch**

Chairman : Professor **Claudio Procesi**, Università di Roma "La Sapienza", Roma-Italy

13.40-14.40 Professor **Toby Stafford**, University of Michigan, Ann Arbor-USA - *Naïve non-commutative blowing up*

14.35-15.25 Professor **Bernhard Keller**, UFR de Mathématiques, Université Denis Diderot - Paris 7, France - *On well-generated triangulated categories*

15.25-15.55 **Coffee**

15.55-16.45 Professor **Hanspeter Kraft**, Mathematisches Institut, Universität Basel-Germany : *A result of Hermite and equations of degree 5 and 6*

16.50-17.40 Professor **Miles Reid**, Mathematical Institute, University of Warwick-UK - *Rings and varieties*

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#### **Saturday 23 October, 2004**

Chairman : Professor **Miles Reid** Mathematical Institute, University of Warwick-UK

09.00-09.50 Professor **Michael Douglas**, The State University of New Jersey, Department of Physics and Astronomy Rutgers, Piscataway-USA - *Non-commutative geometry and Dirichlet branes*

09.55-10.45 Professor **Robbert Dijkgraaf**, University of Amsterdam, Institute for Theoretical Physics, Amsterdam-the Netherlands

10.45-11.15 **Coffee**

11.15-12.05 Professor **Albert Schwarz**, University of California, Department of Mathematics, Davis-USA - *On non-commutative supergeometry and its applications*

12.15-13.30 **Lunch**

Chairman : Professor **Michael Artin**, Massachusetts Institute of Technology, Cambridge-USA

13.40-14.30 Professor **Alan Weinstein**, University of California Berkeley, Department of Mathematics, USA - *Hopfish algebras*

14.35-15.25 Professor **Claudio Procesi**, Università di Roma "La Sapienza", Roma-Italy - *Cycles in hyperplane arrangements and polytopes*

15.25-15.55 **Coffee**

15.55-16.45 Professor **Boris Tsygan**, Penn State University, Mathematical Department, USA - *Index theorems for deformations of Poisson manifolds*

16.50-17.40 Professor **Corrado De Concini**, Università di Roma « La Sapienza » -Roma-Italy - *The Schwarz genus of the Coxeter fibration and polynomial equations*

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**Sunday 24 October, 2004**

Chairman : Professor **Hanspeter Kraft**, Universität Basel, Mathematisches Institut, Switzerland

09.00-09.50 Professor **Pierre Deligne**, Institute for Advanced Study, Princeton-USA - *Questions and examples around quantization*

09.55-10.45 Professor **Alexei Bondal**, Steklov Mathematical Institute, Institute of RAS, Moscow-Russia - *Derived categories of toric varieties*

10.45-11.15 **Coffee**

11.15-12.05 Professor **Kenji Fukaya**, Kyoto University, Japan - *Loop space and holomorphic disc*

12.10-12.25 **Thank you and farewell**

