

SLC 60
SEMINAIRE LOTHARINGIEN DE COMBINATOIRE

DER WITTGENSTEIN-PREIS

Dominique Foata
(Strasbourg)

April 1, 2008
Strobl, Wolfgangsee

DER WITTGENSTEIN-PREIS

Der Wittgenstein-Preis ist
der höchstdotierte Wissenschaftspreis Österreichs.

We can believe it!

DER WITTGENSTEIN-PREIS

höchstdotierte ? yes indeed.

By comparison:

Fields Medal: Can \$ 15 000,
 i.e., 9 758 Euro.

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Fields Medal: Can \$ 15 000,
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Wolf Prize: \$ 100 000,
 i.e., 64 220 Euro.

DER WITTGENSTEIN-PREIS

Kyoto Prize: 50 millions Japanese yen,
i.e., 319 597 Euro

DER WITTGENSTEIN-PREIS

Kyoto Prize: 50 millions Japanese yen,
i.e., 319 597 Euro

Abel Prize: 6 millions Norwegian crowns,
i.e., 750 000 Euro;

DER WITTGENSTEIN-PREIS

2008 Abel Prize Laureates:

John Thompson Jacques Tits



DER WITTGENSTEIN-PREIS

Nobel Prize: 10 millions Swedish crowns (SEK),
i.e., 1 061 712 Euro;

DER WITTGENSTEIN-PREIS

Der Wittgenstein-Preis ist mit bis zu

1,5 Millionen Euro

dotiert.

DER WITTGENSTEIN-PREIS

Jährlich ist der Wittgenstein-Preis
vom Fonds zur Förderung
der wissenschaftlichen Forschung ausgeschrieben

DER WITTGENSTEIN-PREIS

Jährlich ist der Wittgenstein-Preis
vom Fonds zur Förderung
der wissenschaftlichen Forschung ausgeschrieben
und vom
Bundesminister für Bildung, Wissenschaft und Kultur
verliehen.

DER WITTGENSTEIN-PREIS

Der Preisträger muss in Österreich
seine Forschung machen

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aber seine Herkunft und Nationalität
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DER WITTGENSTEIN-PREIS

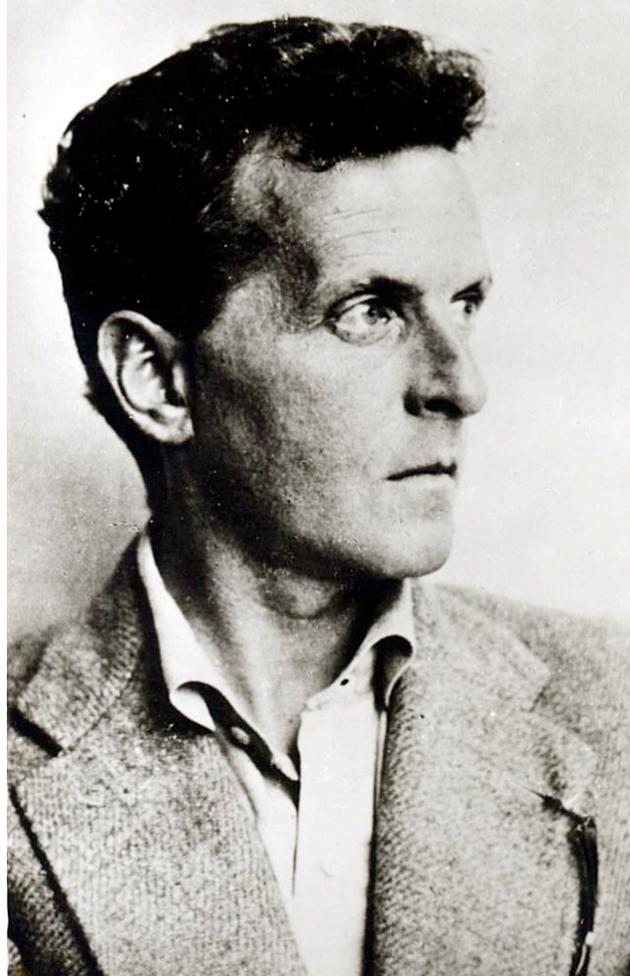
ist nach dem österreichischen Philosophen

Ludwig Wittgenstein.

benannt.

Ludwig Josef Johan WITTGENSTEIN

(April 26, 1889 -- April 29, 1951)



LUDWIG WITTGENSTEIN

From the English Wikipedia:

He worked primarily in
the foundations of logic,
philosophy of mathematics, of mind, and of language.

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From the English Wikipedia:

He worked primarily in the foundations of logic, philosophy of mathematics, of mind, and of language.

The only book-length work he published was the

Tractatus Logico-Philosophicus.

highly influential in analytic philosophy.

LUDWIG WITTGENSTEIN

After G. E. Moore's resignation in 1939

he was appointed to the chair in Philosophy at Cambridge.

He acquired British citizenship soon afterwards.

PAUL WITTGENSTEIN

Maurice Ravel began work on the

Concerto for the left hand (in D) in 1929,

after receiving a commission from the pianist

Paul Wittgenstein [1887-1961],

who had lost his right arm in the Great War.

He was the brother of Ludwig Wittgenstein.

A BIT OF HISTORY

To be able to go out of Austria in 1939

the Wittgenstein family negotiated with the Nazi authorities over the racial status of their grandfather Hermann, claiming that he was the illegitimate son of an "Aryan".

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the Wittgenstein family negotiated with the Nazi authorities over the racial status of their grandfather Hermann, claiming that he was the illegitimate son of an "Aryan".

The Reichsbank got its hands on the large amounts of foreign currency owned by the Wittgenstein family, and this was used as a bargaining tool.

A BIT OF HISTORY

The required Befreiung was granted in August 1939.

The amount signed over to the Nazis by the Wittgenstein family was

1.7 tonnes of gold.

At 2008 prices (US\$900 per ounce), this amount of gold would be worth in excess of US\$50 million.

BACK TO WITTGENSTEIN-PREIS

Started in 1996, two laureates per year.

A rough classification (for the 20 laureates):

Social Sciences and Humanities: 3

Biochemistry: 3

Physics: 5

Biology: 4

Information sciences: 1

Mathematics: 3

Medical Sciences: 1

THE 2007 WITTGENSTEIN LAUREATE



THE 2007 WITTGENSTEIN LAUREATE

Univ.-Prof. Dr. **Christian Krattenthaler**

Klassische Kombinatorik und Anwendungen

CHRISTIAN KRATTENTHALER

A short vita:

A true Viennese, born in 1958.

1977-1984 Studies in Math., Universitaet Wien,
1984 Promotion, 1989 Habilitation.

1994, 1998, visiting Prof., U. Calif. San Diego,
2000, Research scholar, Univ. Louis Pasteur, Strasbourg
2002-2005 Prof., Univ. Lyon-I

Since Sept. 2005: **Universitätsprofessor für diskrete
Mathematik mit besonderer Berücksichtigung der
Kombinatorik an der Fakultät für Math., Univ. Wien**

URSPRUNG:
The talented Viennese School

Ph.D. and Habilitation under
Johann Cigler (lineage: Furtwaengler, Felix Klein, ...)

Other Cigler offsprings:

Josef Hofbauer

Peter Kirschenhofer

Peter Michor

Peter Paule

CHRISTIAN KRATTENTHALER'S FOLLOWERS

Theresia Eisenkoelbl

Ilse Fischer

Markus Fulmek

Martin Rubey

Michael Schlosser

...

CHRISTIAN KRATTENTHALER'S PUBLICATIONS

111 research papers (so far!);

3 expository papers;

2 computer algebra packages
with their documentations

plus RATE.

CHRISTIAN KRATTENTHALER'S PUBLICATIONS

What to choose ?

Classical Combinatorics, indeed,

but penetrating a great many mathematical fields.

SEVERAL FIELDS UNDER STUDY

Lagrange inversion, its q -analogs and operator methods:

Operator methods and Lagrange inversion: A unified approach to Lagrange formulas, Trans. Amer. Math. Soc. 305 (1988), 431-465.

Lattice path counting:

Several papers

Basic hypergeometric series:

A long study...

A SELECTION...

Plane partitions and other...

(with I. M. Gessel), Cylindric partitions, Trans. Amer. Math. Soc. 349 (1997), 429-479.

Determinant evaluation

Advanced determinant calculus, Semin. Lothar. Combin. 42 ("The Andrews Festschrift") (1999), Article B42q, 67 pp.

Classical and Modern Algebra

Identities for classical group characters of nearly rectangular shape, J. Algebra 209 (1998), 1-64.

FURTHER SELECTION

Tableau algebra and combinatorics

Bijjective proofs of the hook formulas for the number of standard Young tableaux, ordinary and shifted, Electronic J. Combin. 2 (1995), #R13, 9 pp.

Tiling enumeration

Many papers, with several collaborators. For example,

(with M. Ciucu), The number of centered lozenge tilings of a symmetric hexagon, J. Combin. Theory Ser. A 86 (1999), 103-126.

FURTHER SELECTION

Algebraic Combinatorics

What is Algebraic Combinatorics? Indeed,

(with L. Orsina and P. Papi), Enumeration of ad-Nilpotent b-ideals for simple Lie algebras, Adv. Appl. Math. 28 (2002), 478-522.

Asymptotics (or Algebraic Combinatorics)

Asymptotics for random walks in alcoves of affine Weyl groups, Semin. Lothar. Combin. 52 (2007), Article B52i, 72 pp.

FURTHER SELECTION

Riemann zeta function

(with Tanguy Rivoal), *Hypergéométrie et fonction zeta de Riemann*, Mem. Amer. Math. Soc. 186, no. 875, Providence, R. I., 2007.

Towards Physics and Combinatorics

(with Karl E. Kürten), *Multistability and fractal properties of Hamiltonian lattice models*, in: *Condensed Matter Theories*, vol. 19, E. Suraud, ed., Nova Science Publ., New York, 2004.

FURTHER SELECTION

Number Theory, proper

(with Heng Huat Chan), Recent progress in the study of representations of integers as sums of squares, Bull. London Math. Soc. 37 (2005), 818-826.

Multiple q -basic series

(with Tanguy Rivoal), Approximants de Pade' des q -polylogarithmes, in: Diophantine Approximation, Developments in Math., vol. 16, Springer-Verlag, 2008.

FURTHER COLLABORATION

with **T. W. Müller** (Algebraic Combinatorics)

with **Karl E. Kürten** (Physics)

with **Tanguy Rivoal** (Number Theory)

The Mathematica Packages HYP and HYPQ

Mathematica packages

for handling hypergeometric series.

On line.

TO CONCLUDE

He is our great scholar,

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He is our great scholar,

who has interacted with many highly talented scientists.
(I gave up counting the number of his co-authors!).

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Also a jolly good fellow.

Congratulations Christian

YOU FULLY DESERVE THE PRIZE