

Workshop on
Function Fields of one Variable over Finite Fields,
Drinfeld Modules and Coding Theory

Institute of Experimental Mathematics, University of Essen

3-7 June, 1998

Program:

Wednesday, June 3rd

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| 9.30 h - 10.30 h | An Introduction to Drinfeld Modules I
Rafiq Omar, University of the Western Cape, South Africa. |
| 11.00 h - 12.00 h | The weight hierarchy of linear codes
N.N. |
| 15.00 h - 16.00 h | An Introduction to Drinfeld Modules II
Rafiq Omar, University of the Western Cape, South Africa. |
| 16.30 h - 17.30 h | Generalized Hamming weights of Reed-Muller codes I
Florian Breuer, University Stellenbosch, South Africa. |

Thursday, June 4th

- 9.30 h - 10.30 h An Introduction to Drinfeld Modules III
Arnold Keet, University of South Africa, Pretoria.
- 11.00 h - 12.00 h Generalized Hamming weights of Reed-Muller codes II
Brink van der Merwe, University Stellenbosch, South Africa.
- 15.00 h - 16.00 h A characterisation of order p automorphisms of the p -adic
open disc
Barry Green, University Stellenbosch, South Africa.
- 16.30 h - 17.30 h Curves with infinite fundamental group
Gerhard Frey, IEM, University Essen, Germany.

Friday, June 5th

- 9.30 h - 10.30 h Reduction Theory and Drinfeld Modules over Finite Fields I
Barry Green, University Stellenbosch, South Africa.
- 11.00 h - 12.00 h Codes and Artin-Schreier extensions of function fields
Henning Stichtenoth, University Essen, Germany.
- 15.00 h - 16.00 h Reduction Theory and Drinfeld Modules over Finite Fields II
Brink van der Merwe, University Stellenbosch, South Africa.
- 16.30 h - 17.30 h Constructing function fields with many rational places from
subcodes of RM codes I
Ilia Aleshnikov, University Essen, Germany.

Saturday, June 6th

- 9.30 h - 10.30 h Drinfeld Modules and Explicit Class Field Theory (An Overview)
Hans-Georg Rück, IEM, University Essen, Germany.
- 11.00 h - 12.00 h Constructing function fields with many rational places from subcodes of RM codes II
Emir Nurbegovic, University Essen, Germany.
- 15.00 h - 16.00 h Drinfeld Modules, Coding Theory and Explicit Equations for Drinfeld Modular Curves
Annika Bruns, IEM, University Essen, Germany.
- 16.30 h - 17.30 h Homology of Drinfeld Modular Curves
Matthias Traulsen, IEM, University Essen, Germany.

Sunday, June 7th

- 9.30 h - 10.30 h *L*-series and Heegner Points of Drinfeld Modular Curves
Hans-Georg Rück, IEM, University Essen, Germany.
- 11.00 h - 12.00 h Résumé