Number Theory Meeting

University of Stellenbosch, South Africa

7-11 December 1998

Programme

VENUE: Department of Mathematics, University of Stellenbosch.

Monday 7 December:

9.30 - 10.30:	On maximal function	n fields and class	field theory I, Pete	r Roquette (Heidelberg).

 $11.00 - 12.00: \quad On \ Grothendieck's \ theory \ of \ Dessins \ d'Enfants, \ Florian \ Pop \ (Bonn).$

12.30 - 14.30: Lunch.

 $15.00 - 16.00: \ \ \textit{A new approach to the Rogers-Ramanujan identities}, \ \textit{Arnold Knopfmacher (WITS)}.$

16.00 - 16.30: Tea/Coffee.

 $16.30 \hbox{ - } 17.30 \hbox{:} \quad \textit{A sharp lower bound for the number of irreducible normal subgroups of a finite group,} \\ \quad \text{Marcel Wild (US)}.$

Tuesday 8 December:

9.30 - 10.30:	Maximal function	fields and class	field theory I	I, Peter 1	Roquette	(Heidelberg).
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11.00 - 12.00: On Towers of function fields I, Brink van der Merwe (US).

12.30 - 14.30: *Lunch outing (Delheim)*

15.00 - 16.00: Isomorphism versus elementary equivalence – some consequences of Voevodsky's theorem, Florian Pop (Bonn).

16.30 - $17.30\colon$ Rethinking "Basic Number Theory", Kenneth Hughes (UCT).

Wednesday 9 December:

Change of venue for this day: Department of Mathematics, University of the Cape Town.

9.30 - 10.30: On Gauss periods of fixed order, Stan Gurak (Boston).

11.00 - 12.00: Mellin transforms and asymptotics: Digital sums, Helmut Prodinger (WITS).

12.00 - 14.00: Lunch.

14.00 - 18.00: Outing: Trip to Cape Point.

Thursday 10 December:

9.30 - 10.30: Maximal function fields and class field theory III, Peter Roquette (Heidelberg).

11.00 - 12.00: Algebraic curves over finite fields with many rational points: Constructions

 $using\ Hilbert\ Class\ Fields,\ Rafiq\ Omar\ (UWC).$

12.30 - 14.00: Lunch.

14.30 - 15.10: On the number of non-isomorphic binary codes, Marcel Wild (US).

15.10 - 15.40: *Tea/Coffee*.

15.40 - 16.20: Towers of function fields II, Brink van der Merwe (US).

19.00—: Workshop dinner.

Friday 11 December:

9.30 - 10.30: Maximal function fields and class field theory IV, Peter Roquette (Heidelberg).

11.00 - 12.00: Anabelian Geometry, Florian Pop (Bonn).

12.30 - 14.00: Lunch.

14.00 - 16.00: Opportunity for short talks.

16.00 — : Outing: Visit to a wine farm.

Organizers: Barry Green, Brink van der Merwe.

e-mail: bwg@land.sun.ac.za, abvdm@land.sun.ac.za

Contact Persons: At UCT, Kenneth Hughes. At UWC Rafiq Omar.