#### TATA INSTITUTE OF FUNDAMENTAL RESEARCH HOMI BHABHA ROAD, MUMBAI 400 005

#### **SCHOOL OF MATHEMATICS**

# Workshop on Representation Theory of Finite Groups of Lie type: Deligne-Lusztig theory

December 5–17, 2011

DAY/DATE	9.30 a.m10.30 a.m.		11.00 a.m12.00 p.m.	12.05 p.m 1.05 p.m.		2.30 p.m3.30 p.m.		4.00 p.m5.00 p.m.
Monday, Dec. 05	D.Prasad (I) <sup>++</sup>	Т	Anupam K. Singh <sup>++</sup>	Amritanshu Prasad (i)++	L	Maneesh Thakur <sup>++</sup>	Т	Amritanshu Prasad (ii) +
Tuesday, Dec. 06	Anupam Kumar Singh <sup>++</sup>		Shripad Garge <sup>++</sup>	Amritanshu Prasad (i)++	U	Ram Murty <sup>++</sup>		Maneesh Thakur <sup>+</sup>
Wednesday, Dec. 07	Anupam Kumar Singh <sup>++</sup>	Ε	Shripad Garge <sup>++</sup>	Amritanshu Prasad (i)++	Ν	Maneesh Thakur <sup>++</sup>	Ε	Amritanshu Prasad (ii) +
Thursday, Dec. 08	Anupam Kumar Singh <sup>++</sup>		Shripad Garge <sup>++</sup>	Amritanshu Prasad (i) <sup>++</sup>	С	Maneesh Thakur ++		Maneesh Thakur <sup>+</sup>
Friday, Dec. 09	Anupam Kumar Singh <sup>++</sup>	Α	Shripad Garge <sup>++</sup>	Amritanshu Prasad (i) <sup>++</sup>	Η	Maneesh Thakur <sup>++</sup>	Α	Maneesh Thakur <sup>+</sup>
Saturday, Dec. 10	Shripad Garge <sup>++</sup>		D. Prasad (II) <sup>++</sup>	Amritanshu Prasad (i) <sup>++</sup>		Maneesh Thakur <sup>++</sup>		Amritanshu Prasad (ii) <sup>+</sup>

Anupam Kumar Singh	:	Algebraic groups - an introduction.
Shripad Garge	:	Rationality questions.
Maneesh Thakur and others	:	Problem sessions on Algebraic Groups.
Amritanshu Prasad (i)	:	Green's work on $GL(n, \mathbb{F}_q)$ .
Amritanshu Prasad (ii)	:	Problem sessions.
D. Prasad (I)	:	Introductory Lecture.
D. Prasad (II)	:	Summary.
Ram Murty	:	The Uncertainty Principle and a theorem of Tao.

The lectures will be held in Lecture Room (AG-69)<sup>++</sup>, Lecture Room (AG-77)<sup>+</sup>

#### TATA INSTITUTE OF FUNDAMENTAL RESEARCH HOMI BHABHA ROAD, MUMBAI 400 005

#### SCHOOL OF MATHEMATICS

#### Workshop on Representation Theory of

#### Finite Groups of Lie type: Deligne-Lusztig theory

#### December 5–17, 2011

DAY/DATE	9.30 a.m11.30 a.m.		11.30 a.m01.00 p.m.	L	2.30 p.m4.00 p.m.	
Monday, Dec. 12	K.N. Raghavan <sup>+</sup>	Τ	Ryan Vinroot <sup>+</sup>	U	C.S. Rajan <sup>+</sup>	Т
Tuesday, Dec. 13	K.N. Raghavan <sup>@@</sup>	E	N. Thiem <sup>@@</sup>	Ν	C.S. Rajan <sup>@@</sup>	Ε
Wednesday, Dec. 14	K.N. Raghavan <sup>@@</sup>	Α	Ryan Vinroot <sup>@@</sup>	С	D. Prasad <sup>@@</sup>	Α
Thursday, Dec. 15	D. Prasad <sup>@@</sup>		N. Thiem <sup>@@</sup>	Η	D. Prasad <sup>@@</sup>	

K.N. Raghavan : Parabolic induction, Jacquet modules, intertwining algebra, Mackey theory.

C.S. Rajan : *l*-adic cohomology, a fixed point formula;?? characters of tori, and the *L*-group formalism.

- D. Prasad : Deligne-Lustig representations.
- Ryan Vinroot : Representations of Unitary groups, base change, ennola duality.
- N. Thiem : Representations of Unitary groups, base change, ennola duality.

The lectures will be held in Lecture Room (AG-77)<sup>+</sup> Lecture Theatre (A-66)<sup>@@</sup>

#### TATA INSTITUTE OF FUNDAMENTAL RESEARCH HOMI BHABHA ROAD, MUMBAI 400 005

#### **SCHOOL OF MATHEMATICS**

### **Conference on Representation Theory of**

## Finite Groups of Lie type: Deligne-Lusztig theory

## December 16–17, 2011

DAY/DATE	9.30 a.m10.30 a.m.	Т	11.00 a.m12.00 p.m.	L	2.30 p.m3.30 p.m.	Τ	4.00 p.m 5.00 p.m.
Friday, Dec. 16	Jeff Adler <sup>+</sup>	Е	Ryan Vinroot <sup>+</sup>	UN	Narasimha Sastry <sup>+</sup>	Е	Bhama Srinivasan <sup>+</sup>
Saturday, Dec. 17	B.Sury <sup>@@</sup>	Α	N. Thiem <sup>@@</sup>	СН	Preena Samuel <sup>@@</sup>	Α	Bhama Srinivasan <sup>@@</sup>

Jeff Adler	:	Basechange for $U(2,1)$ for $p$ -adics and D-L theory.
Ryan Vinroot	:	Klyachko models for unitary groups.
N. Thiem	:	TBA
Bhama Srinivasan	:	Modular representations of finite groups of Lie type.
B. Sury	:	Howlett-Lehrer theory.
Narasimha Sastry	:	Geometries of groups of type $F4$ and $E6$ .
Preena Samuel	:	TBA

The lectures will be held in Lecture Room (AG-77)<sup>+</sup> Lecture Theatre (A-66)<sup>@@</sup>