

## DIANA FROST SHELSTAD

Born Diana Louise Frost, Sydney, NSW, Australia

B.A. (Hons) University of Tasmania, December 1967

M.Sc. Monash University, date thesis submitted: June 1969

Ph.D. Yale University, May 1974

Thesis: Some character relations for real reductive algebraic groups.

Advisor: R. Langlands

Assistant to R. Langlands, Institute for Advanced Study, 1973 – 74

Assistant, Institute for Advanced Study and

Assistant Professor, Haverford College, 1974 – 75

Ritt Assistant Professor, Columbia University, 1975 – 80

Associate Professor, Rutgers University (New Brunswick), 1980 – 81

Associate Professor, Rutgers University (Newark), 1981 – 85

Professor, University of Utah, 1985 – 89

Professor II,\* Rutgers University (Newark), 1988 –

\*July 2013, university-wide title change to Distinguished Professor

Visiting appointments: University of Dijon, February 1980

Institute for Advanced Study, Member: 1982 – 83,

Spring 1994, and Spring 2001

University of Paris VII, Spring 1987

Harvard University, Spring 1992

Characters and inner forms of a quasi-split group over  $\mathbf{R}$ ,

Compositio Math., 39 (1979), pp. 11 – 45.

Orbital integrals and a family of groups attached to a real reductive group, *Annales Scient. Ec. Norm. Sup.*, 12 (1979), pp. 1 – 31.

Orbital integrals for  $GL_2(\mathbf{R})$ , *Proc. Sympos. Pure Math.*, XXXIII, part 1, Amer. Math. Soc. (1979), pp. 107 – 110.

Notes on L-indistinguishability (based on a lecture of R. P. Langlands), *Proc. Sympos. Pure Math.*, XXXIII, part 2, Amer. Math. Soc. (1979), pp. 193 – 203.

Base change and a matching theorem for real groups, in *Noncommutative Harmonic Analysis and Lie Groups*, Springer Lecture Notes 880 (1981), pp. 425 – 282.

Embeddings of L-groups, *Canad. J. Math.*, 33 (1981), pp. 513 – 558.

L-indistinguishability for real groups, *Math. Annalen*, 259 (1982), pp. 385 – 430.

Orbital integrals, endoscopic groups and L-indistinguishability for real groups, in *Journées Automorphes*, *Publ. Math. Univ. Paris VII*, 15 (1983), pp. 135 – 219.

Endoscopic groups and base change  $\mathbf{C}/\mathbf{R}$ , *Pacific J. Math.*, 110 (1984), pp. 397 – 415.

[With R. Langlands] On principal values on p-adic manifolds, in *Lie Group Representations II*, Springer Lecture Notes 1041 (1984), pp. 250 – 279.

[With R. Langlands] On the definition of transfer factors, *Math. Annalen*, 278 (1987), pp. 219 – 271.

A formula for regular unipotent germs, in *Orbites Unipotentes et Représentations II*, *Astérisque* 171, 172 (1989), pp. 275 – 277.

[With R. Langlands] Orbital integrals on forms of  $SL(3)$ , II, *Canad. J. Math.*, XLI (1989), pp. 480 – 507.

[With R. Langlands] Descent for transfer factors, in *The Grothendieck Festschrift II*, Birkhauser (1991), pp. 485 – 563.

Transfer and descent: some recent results, in *Harmonic Analysis on Reductive Groups*, Birkhauser (1991), pp. 297 – 304.

[With R. Kottwitz] *Foundations of Twisted Endoscopy* *Astérisque* 255, Math. Soc. France, 1999, 196 pages.

Basic endoscopic groups, *Compositio Math.*, 120 (2000) pp. 317 – 325, appendix to “Poles of intertwining operators via endoscopy” by F. Shahidi.

Tempered endoscopy for real groups, I: geometric transfer with canonical factors, in *Representation Theory of Real Reductive Groups*, *Contemporary Math.*, 472 (2008), pp. 215 – 246.

Tempered endoscopy for real groups, III: inversion of transfer and L-packet structure, *Journal of Representation Theory*, 12 (2008), pp. 369 – 402.

Tempered endoscopy for real groups, II: spectral transfer factors, in *自守形式与 Langlands 纲领 (Automorphic Forms and the Langlands Program)*, Higher Education Press (China), 2009, and International Press (US), 2010, pp. 236 – 276.

On geometric transfer in real twisted endoscopy, *Annals of Math.*, Vol. 176 (2012), pp. 1919 – 1985. [here](#)

On the structure of endoscopic transfer factors. Accepted for publication, 22 pp. arXiv [1412.4649](#)

On elliptic factors in real endoscopic transfer I. *Progress in Math* 312, Birkhäuser (2015), pp. 455 – 504. arXiv [1412.4647](#)

*All items above peer-reviewed; all items below available at <http://andromeda.rutgers.edu/~shelstad>*

Examples in endoscopy for real groups. Notes for talks, Banff 2008 summer school and workshop *Stable trace formula, Galois representations and Shimura varieties*, 59 pp.

Some results on endoscopic transfer. Notes for Banff 2011 workshop *L-packets*, 18 pp. Another abstract [here](#)

Transfer in endoscopy (and beyond) for real groups. Slides for [talk](#) at inaugural *Fields Medal Symposium*, Oct 2012

Spectral questions in endoscopic transfer for real groups. Slides for [talk](#) at Schmid conference *Representation Theory, Automorphic Forms and Complex Geometry*, May 2013

[With R. Kottwitz] On splitting invariants and sign conventions in endoscopic transfer. Jan 2012, 19 pp. arXiv [1201.5658](#)

A note on real endoscopic transfer and pseudo-coefficients. Preprint (preliminary version, Nov 2010), 6 pp.

Transfer results for real groups. [Slides](#) for [talk](#) at Vogan conference *Representations of Reductive Groups*, May 2014