BIOGRAPHICAL SKETCH OF JOSEPH (J.M.) LANDSBERG

Appointments: Professor at Texas A&M University since 2004. Previous appointments: U. Toulouse *chaire d'excellence* (6 months over 2 year period starting 2022), Harvard (spring '22), UC Berkeley/Simons Inst. Chancellor's professor (fall '14), Harvard (fall '04), Georgia Tech (8/01 -8/04), Université Paul Sabatier, Toulouse (9/96-7/00), Columbia University (9/94-5/95, 1/96-5/96), IHES (9/95-12/95), University of Pennsylvania Hans Rademacher Instructor and NSF postdoctoral fellow (9/90-7/92, 9/93-5/94), IAS (9/92-4/93).

Research: Applications of algebraic geometry and representation theory to questions in theoretical computer science (algebraic complexity theory) and other areas, the geometry and application of tensors, quantum information theory. Past research: geometry of exceptional groups, exterior differential systems, geometry of homogenous varieties, classical algebraic geometry.

Distinctions: U. Toulouse *chaire d'excellence* (6 months over 2 year period starting 2022), Clay senior scholar for tensor program at IPAM (spring 2021), Stanford University Exceptional Teacher Tribute (2018), CBMS lecture series (2017), AMS fellow (class of 2017), UC Berkeley Chancellor's Professor (fall 2014), NSF post-doctoral fellow (1990-93).

Mentoring: 14 PhD students, plus 4 current. PhD students obtained postdoctoral fellowships at U. Chicago (3), Harvard, UC Berkeley, QMath Copenhagen, Duke, Max Plank Inst. Leipzig. 2 obtained NSF post-doctoral fellowships. 10 currently in academic positions, 3 in non-academic research. One currently junior permanent member of Chinese National Academy of Science, one *chaire d'excellence junior* (junior endowed associate professor) Toulouse. Former post-doctoral mentees currently professors at U. Warwick, U. Torino, IPAM/U. Warsaw, U. Trento, U. Tromso, Boise State U.

Books: *Quantum computing and quantum information theory: a mathematical perspective* AMS GSM (to be published Jan. 2024), *Tensors: Asymptotic Geometry and Developments 2016-2018*, AMS CBMS lecture notes (2019), *Geometry and Complexity Theory*, Cambridge (2017), *Tensors: Geometry and Applications*, AMS GSM (2012), and co-author (with T. Ivey) of *Cartan for Beginners* AMS GSM (2003), second edition (2016).

Major organizing: TGTC (grant PI/coPI 2006-2023), Simons' semester in Algorithms and Algebraic Geometry (fall 2014), AMS MRC (8/12), ICERM inaugural workshop (8/11). Substantial additional workshop/conference organizing.

Additional Information: NSF funding since returning to US in 2003 (one year gap, otherwise uninterrupted). Over 100 refereed publications. Since 2000: Over 55 plenary/principle lectures at conferences, Over 130 invited colloquium/seminar talks, over 25 extended research invitations. Over 20 Lecture series/Intensive research courses.

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