BIOGRAPHICAL SKETCH OF JOSEPH (J.M.) LANDSBERG

Appointments: Professor at Texas A&M University since 2004. Previous appointments: 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, Cartan style differential geometry, classically influenced algebraic geometry, the geometry of homogeneous varieties, categorical generalizations of Lie algebras.

Distinctions: Stanford University Exceptional Teacher Tribute (2018), CBMS lecture series (2017), AMS fellow (class of 2017), UC Berkeley Chancellor's Professor (fall 2014), NSF postdoctoral fellow (1990-93).

Mentoring: 10 PhD students, plus 5 current. Nine currently in mathematics research or research and teaching positions. 9 post-docs, plus 3 current. Seven currently in academic positions with research components.

Books: *Tensors: Asymptotic Geometry and Developments 2016-2018*, AMS CBMS lecture notes (2019), *Geometry and Complexity Theory*, Cambridge (2017), *Tensors: Geometry and Applications*, AMS (2012), and co-author (with T. Ivey) of *Cartan for Beginners* AMS (2003), second edition (2016). *Quantum computing and quantum information theory for mathematicians* (draft available).

Major organizing: TGTC (grant PI/coPI 2006-present), Simons' semester in Algorithms and Algebraic Geometry (fall 2014), SIAGA conference steering committee (8/15), 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 80 refereed research publications. Over 50 plenary/principle lectures at conferences since 2000. Over 100 invited colloquium/seminar talks since 2000. Over 15 extended research invitations since 2000. Plenary lectures at conferences with over 200 participants: International Linear Algebra Society (7/19) Southeast AMS sectional meeting (4/18), SIAM Algebraic Geometry meeting (7/17), International Linear Algebra Society (8/11), DGA (8/10), MEGA (6/09). 17 Lecture series/Intensive research courses since 2000. Editor: FOCM, LAA, DGA, SIGMA.

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