

ASSANE LO

Department of Mathematics and Statistics, KFUPM PO Box 5046, Dhahran 31261 Kingdom of Saudi Arabia +966
(0) 3860 2193; assane@kfupm.edu.sa

Education

- **University of Arizona**—Tucson, AZ
Ph.D in Mathematics (2007)
 - Dissertation Title: Witten Laplacian Methods for Critical Phenomena
 - Thesis Advisor: Haru Pinson, Ph.D
- **University of Dakar**—Dakar, Senegal
Bachelor of Science (1999)
 - Major: Mathematics
 - Minor: Physics

Publications

- Witten Laplacian Methods for the Decay of Correlations. *Journal of Statistical Physics, Volume 132, Number 2 / July, 2008, Pages 355-396.*
- On the Exponential Decay of the n-point Correlations and the Analyticity of the Pressure *J. Math. Phys. 48 , 123506, 2007.*
- Witten Laplacian Methods For Critical Phenomena *Mathematical Monograph 12041, ISBN-NR: 978-3-639-05658 VDM Verlag Dr. Müller Germany, 2008 (Ph. D Thesis).*

Research Interests

- Analysis and PDE.
- Mathematical Physics: Critical Phenomena in Statistical Mechanics, and Statistical Fluid Mechanics.

Employment History

- September 2007-Now: Assistant Professor- KFUPM, Dhahran (Saudi Arabia).
- Spring 2005-Spring 2007: Graduate Teaching Associate-University of Arizona, Tucson USA.
- Fall 2002-Spring 2005: Graduate Teaching Assistant-University of Arizona, Tucson USA.

Teaching Experience

- **KFUPM:** Graduate Real analysis, Calculus III, Calculus II.
- **University of Arizona primary instructor:** Vector Calculus, Calculus II, Calculus I, Element of Calculus, College Algebra.
- **Super TA-University of Arizona:** Graduate and Undergraduate real analysis.
- **Undergraduate research mentor**-University of Arizona.

Honors

- Government of Senegal-National Merit Scholarship-Univ.of.Dakar (1994-1999).
- Government of Senegal-National Merit Scholarship-ENS, Dakar (1999-2000).
- Junior Faculty Grant NO: JF080008-KFUPM (2008-2009).

Selected Talks

- *Decay of correlations in two-dimensional plane rotors*
Mathematical Physics Seminar, University of Arizona, Spring 2004
- *Correlations in Kac-Like Models in the Convex Case.* Graduate Student Colloquium, University of Arizona, Fall 2004
- *Decay of correlations and Witten Laplacians Part I and II*
Mathematical Physics Seminar, Univ.of.Arizona, Fall 2005
- *Witten Laplacian Methods in Statistical Mechanics Part I*
Analysis and its applications seminar, Univ.of.Arizona, Fall 2006
- *Witten Laplacian Methods in Statistical Mechanics Part II*
Mathematical Physics Seminar, Univ.of.Arizona, Fall 2006

Selected Conferences and Workshops

- *Midwest Geometry Conference*
University of Iowa, May 18-20, 2007
- *AMS Western Sectional Meeting*
University of Arizona, April 21-22, 2007
- *Joint AMS/MAA Mathematics Meeting*
New Orleans, January 5-8, 2007
- *Yamabe Memorial Symposium*
University of Minnesota, September 18, 2004

Committee Memberships

- Mathematics Awareness Committee-KFUPM
- Calculus Committee-KFUPM

Memberships

- American Mathematical Society (AMS)
- Mathematical Association of America (MAA)
- International Association of Mathematical Physics(IAMP)