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March 20, 2012

To Whom It May Concern:

I am writing to you on behalf of Malika Kharouf, who is applying for the assistant professor position in your department. I first met Malika in November of 2006, when I visited Telecom ParisTech. Jamal Najim, Walid Hachem, and I agreed to work on the distributional behavior of linear statistics of the eigenvalues of a certain class of random matrices, extending results I had done on another ensemble of random matrices. Malika, being a graduate student of Professors Najim and Hachem, joined in on the collaboration. We worked hard on the difficult mathematical expressions we needed to understand. It took several years to iron things out. I returned to Telecom ParisTech in May, 2008, and again in March, 2010. Malika was an equal partner in all of this. I found her to be extremely bright, capable of handling the difficult formulas. She has demonstrated to me a deep understanding of the mathematics involved, and strong capabilities in doing significant research in mathematics. It took a while longer to complete the work. I feel proud of the paper produced which had been submitted for publication this past June.

In October, 2010 I attended a workshop at Telecom ParisTech. Malika, already finished with her PhD, gave a talk on our work. She did a fine job, displaying strong teaching abilities.

I feel confident Malika will continue to produce excellent mathematical results. I give my strongest recommendation for her to receive the assistant professor position.

Sincerely,



Jack W. Silverstein
Professor

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26 Mar. 2012

Dear Search Committee:

I am writing to enthusiastically recommend Malika Kharouf for an assistant position in your department.

I have known Malika Kharouf since July, 2011 when she attended " French-Chinese Summer institute: Random matrix theory and its application to high dimensional statistics", which I attended as well, from 11 July -31 July, 2011 in North-East Normal University in Changchun city, China.

In her application for the above position she impressed me as someone who was intellectually highly capable and well trained. Her thesis work struck me as being a good blend of random matrix theory, computations and engineering focus. It was in a difficult area and she came to me highly recommended.

As a fresh Ph.D. Malika has already had nice papers which were published in the pres-

tigious journal " IEEE Trans Inform. Theory ". We had conversations and shared some ideas regarding random matrix theory in Changchun city, China. I was impressed with her excellent communication skills, strong motivations and solid theoretic foundation. This was further evidenced by our recent cooperation. We are working together on a project of a non-centered model (information-plus-noise model). During cooperation and discussions she also shows great passion and interest in the research. Whenever coming across difficulty, she never gives up and instead comes up with some ideas to overcome it.

In summary Malika has an outstanding research capability in development of random matrix theory and its applications to wireless communication and complex statistical problems. I give Malika my strongest support in her application to Assistant Professor in your Department. Please do not hesitate to contact me for further information.

Sincerely

A handwritten signature in blue ink, appearing to read 'Guangming Pan', is written over the printed name.

Guangming Pan

Assistant Professor

School of Physical and Mathematical Sciences

Nanyang Technological University

Paris, le 22 mars 2012

À l'attention de la personne concernée,

C'est avec plaisir que j'écris ici une lettre de recommandation pour Malika Kharouf dans le cadre de sa candidature à un poste de Maître de Conférences dans votre établissement.

J'ai fait la connaissance de Malika alors qu'elle était ATER dans mon laboratoire lors des années 2009-2011. Je voudrais dire que son passage a été très apprécié par l'ensemble des membres du laboratoire, pour son implication dans la vie du laboratoire, ce qui est une chose assez rare chez des ATER qui sont par définition des membres de passage. Elle s'est par exemple investie dans l'organisation de la venue de collègues allemands, dans le cadre de notre collège doctoral Paris-Potsdam. Elle a toujours proposé généreusement ses services pour des échanges d'enseignement, où elle donnait d'ailleurs toute satisfaction.

Personnellement, j'ai beaucoup apprécié sa présence dans le laboratoire pour toutes les discussions que j'ai eues avec elle sur les matrices aléatoires. Je ne suis pas vraiment spécialiste de ce sujet, et pourtant, mes discussions avec Malika ont été fructueuses. Elle m'a expliqué les méthodes qu'elle utilisait pour étudier la limite des distributions empiriques des valeurs singulières de matrices ayant un certain profil de variance et m'a initié aux fascinantes méthodes de Girko.

Je suis donc convaincu que le laboratoire qui la recrutera fera le choix d'une collègue très sociable, dynamique, et qui a la qualité rare de savoir faire partager son goût pour ses sujets.

Nathanaël Enriquez
Professeur de Mathématiques
Université Paris-Ouest

