

## CHAIRPERSON POSITION

### **Peter Benner Candidate Statement:**

The development of the SIAG LA meetings with its increasing attendance, and the growing number of workshops and conferences dedicated to (aspects of) Linear and Multilinear Algebra as a whole, show that our field is very lively and active. In the past years, it has become increasingly important in many current application areas such as data mining, image processing, model reduction, biosciences, analysis of stochastic processes, machine learning, etc. These areas complement the classic application areas like the numerical solution of partial differential equations and optimization problems, eigenvalue problems from mechanics, computational chemistry and physics, and many more. Our field is often driven by emerging application areas, e.g., compressive sensing and sparse recovery, but also from increasingly complex problems in the classical areas, and new challenges constantly appear at the horizon, like the Exascale Computing Era. I would like to continue the successful work of our SIAG at the intersection of math, computer science, economics, engineering, and the sciences, in particular by strengthening the important role that our SIAG has to play in facing the abovementioned challenges.

An important issue is to find a way how all the exciting applications that we work on can be used to make our field attractive for post-graduate students. I would like to see the SIAG LA playing an active role in exploring new paths targeting at teaching activities addressing this issue.

One of my key interests in chairing the GAMM activity group “Applied and Numerical Linear Algebra” 2009-13 was to increase cooperation of the different international interest groups in Linear and Multilinear Algebra, like the SIAG/LA, ILAS, the Spanish ALAMA network, etc. I would like to strengthen this aspect by having the SIAG/LA more involved in such international exchange, beyond our tri-annual meetings. This would facilitate the incorporation of the numerous young researchers from Europe, Asia, and, Africa into our scientific community.

### **James Nagy Candidate Statement:**

Linear algebra plays a central role in applied mathematics and scientific computing, which is highlighted and promoted through the SIAM-ALA conferences, and by SIAG/LA sponsored mini-symposia at other conferences, such as SIAM Annual Meetings. Other important SIAG-LA activities include promoting the International Summer School on Numerical Linear Algebra (ISSNLA), the Gene Golub SIAM Summer School (G2S3), selecting the SIAG/LA Prize, and continuing to nourish a strong relationship with the International Linear Algebra Society (ILAS). As Chair of the SIAG-LA, I will closely oversee these important activities, and use my recent experiences as the SIAG/LA Vice-Chair and co-Chair of the 2015 SIAM-ALA Conference to help further strengthen and improve the SIAG and its activities. For example, I would like to strongly encourage and promote the prominence of poster sessions at the SIAM ALA Conference to allow for increased participation, while reducing parallelism of contributed talks. In addition, all of the SIAGs have experienced reduced participation by students, and I plan to work with SIAM and local student chapters to help turn this trend around. I have enjoyed working as Vice Chair for SIAG/LA, and feel it would be a privilege to continue to play an active role in the activity group's further success and growth.

## VICE CHAIR POSITION

### **Zhaojun Bai Candidate Statement:**

SIAG/LA is a part of my professional life. SIAG/LA faces a number of challenges and opportunities. If elected, I will work with SIAM officers and SIAG/LA members to actively promote research and seek opportunities in linear algebra and its application around the world.

### **Alison Ramage Candidate Statement:**

"The SIAM Activity Group on Applied Linear Algebra has been flourishing in recent years, with the SIAM Conference on Applied Linear Algebra as its showpiece. I would be honored to play a role in continuing this growth and success, at a time when there are many new opportunities emerging for researchers and practitioners in linear algebra. It is important that our discipline takes its rightful place front and center of many evolving topics, such as data science, networks and uncertainty quantification, as well as continuing to play a key role in more traditional application areas, and the SIAG can offer its members a great deal of support with this. From a personal point of view, I have so far thoroughly enjoyed my experience of working with SIAM in a variety of roles and have benefited greatly from the opportunities it presents."

### **PROGRAM DIRECTOR POSITION:**

#### **Melina Freitag Candidate Statement:**

Linear algebra plays a crucial role in many areas of mathematics, and is at the heart of applications in science, engineering and industry. Furthermore, SIAM as a society enjoys a prominent role in the international applied mathematics community. It is not surprising, therefore, that the SIAM Activity Group on LA has been flourishing in recent years.

I have greatly enjoyed serving as the SIAM-UKIE Secretary and would enjoy the challenge of serving as Program Director of the SIAM Activity Group on Linear Algebra. This role mainly involves organizing the activity group's conferences and minisymposia. SIAG/LA already enjoys strong links with other societies in Europe (GAMM, ALA, IMA) and worldwide, and I would be looking to strengthen these. When organizing and publicizing conferences, online presence is crucial. I would therefore look to increase the online presence of SIAG/LA, both via the existing website and through the use of social media.

#### **Xiaoye Sherry Li Candidate Statement:**

Linear algebra is an indispensable tool for solving many challenging real-world problems in computational science and engineering.

SIAG/LA provides an important forum for people to explore linear algebra research and application in increasingly diverse fields of computing. SIAG/LA can play a more important role in

- (1) Nurturing non-traditional areas that require cross-cutting technologies, such as analysis of experimental data from scientific instruments,
- (2) Facilitating closer collaboration between theoreticians and practitioners,

(3) Providing more opportunities to involve graduate students and junior scholars, and promoting diversity.

If elected to the SIAG/LA officer, I would like to engage with the SIAM and SIAG/LA community in developing better approaches in these areas.

## **SECRETARY POSITION**

### **Jennifer Pestana Candidate Statement:**

Members of the SIAM Activity Group on Linear Algebra work all over the world in industry and academia, and conduct research on a wide range of theoretical and applied topics. For linear algebra to flourish it is imperative that these members, with their diverse interests, interact with each other and with other mathematicians, scientists and engineers.

The SIAG/LA is an ideal forum for communication and I would seek to encourage this, building on the innovations of our current secretary. Additionally, I would like to involve our student and early career members more by sharing relevant events and articles, and by highlighting their achievements.

### **Raf Vandebril Candidate Statement:**

I remember the first conference I have been to very clearly: 2001, the SIAM annual meeting in San Diego. It was an overwhelming experience: first time in the US, first conference, first lecture, not to mention the flashlight I got when registering due to the black-out risk at those days in California. As a mathematician I was impressed by the diversity of applications and related numerical problems that were discussed and presented. Since that conference my interest in applications and linear algebra kept growing. Without the incentives of SIAM I would never have been able to connect to so many people, offering me so many opportunities: research visits, collaborations, industry contacts, and not to forget the many new friends I made.

What makes the SIAM activity group on linear algebra so attractive and what I believe to be one of the strengths is its diversity. There are mathematicians, engineers, computer scientists, and they are all attracted by the beauty and tools that linear algebra has to offer. Moreover, we welcome new disciplines every day. We should foster this feeling of connectedness, and invest on it for the future. Because it's those connections that make us rich!