

ICAM Newsletter. August 2022

Welcome to the ICAM August 2022 Newsletter. We hope you are all enjoying a productive and happy summer season. Please share our news with your colleagues at your ICAM node.

<u>ICAM</u> has a lot of news to share with you this summer: the arrival of our new co-director Cristina Marchetti, the announcement of a new science exchange program in the area of soft and biological matter, the receipt of a \$2M dollar grant from the National Science Foundation for an Accelnet in Quantum Materials, and the joining of two new branches—UC Santa Barbara and the MacDiarmid Institute for Advanced Materials and Nanotechnology in New Zealand—which gives us the first presence in that country.

This has been an active time for ICAM supported schools and workshops. Recent ICAM schools and workshops have taken place in Cargèse, Maryland, London, Sherbrooke and Vancouver—with upcoming events in Leiden, Trieste, Houston, and Julich.

These are exciting times for ICAM and the emergent frontier of condensed matter physics. We are seeking new proposals for ICAM workshops and applications to our <u>Accelnet</u>, <u>QuantEmX</u>, and <u>SlimEx</u> programs. As always, we encourage all of you to spread the word of ICAM and to bring our various programs to the attention of your colleagues, postdocs, and students.

Sincerely, Cristina, Piers and Rajiv ICAM Co-directors.

New ICAM Co-director Cristina Marchetti



We should like to begin by welcoming Cristina Marchetti, from the Department of Physics, UC Santa Barbara, as a co-director of ICAM. Cristina was trained as a physicist at the University of Pavia in Italy and University of Florida, Gainesville in the US. Cristina specializes in statistical and condensed matter physics and in 2019, she received the Leo P. Kadanoff Prize from the American Physical Society for recognition of her contributions to statistical physics. Cristina brings to our team a formidable expertise in soft, active and living matter that will enable ICAM to expand its activities in these areas (see below).

Expansion of ICAM in Soft and Living Matter

With the joining of Cristina Marchetti as co-director, ICAM begins a program of expansion of its activities in soft and living matter. New or recently renewed branches with strong programs in this area include the University of Chicago, Kent State, Rice, UC Santa Barbara, and the MacDiarmid Institute for Advanced Materials and Nanotechnology in New Zealand. We look forward to upcoming in-person ICAM-supported Workshops, such as *Active Matter: the Next 25 Years* to be held in Leiden, Netherlands August 22-26, 2022, and *Signatures of Nonequilibrium Fluctuations in Life* to be held at ICTP, Trieste in 2023.

SLiM-Ex Science Exchanges in Soft and Living Matter

We are excited to announce <u>SLiM-Ex</u>, a newly established program that will provide grants for partial support of Junior Scientists Exchanges, similar to our well established <u>QuantEmX</u> program. Both provide funding to continue existing collaborations and to create new ones, with varying length of stay.

We encourage junior scientists across our network to apply now at our new <u>SLiM-Ex webpage</u>. The first application window is open through November 30 for travel starting December 2022.

We are currently working together to identify new venues for future funding our soft/bio activities and look forward to continue to grow that component of ICAM in the coming years.

AccelNet for Quantum Materials:

ICAM has received a \$2M dollar, four-year AccelNet grant from the NSF Office of International Science and Engineering (OISE) to accelerate and catalyze new discoveries in Quantum Materials through enhanced international cooperation.

The Accelnet grant links ICAM into a super-network of ten international research networks:

Participating Networks and representatives:

ICAM (Institute for Complex Adaptive Matter) (R. Singh)

EPiQS (Emergent Phenomena in Quantum Systems) (J. P. Paglione, V. Madhavan)

Correlated Magnetism (Germany) (R. Moessner)

Elasto-QMAT (Germany) (J. Schmalian)

CT-QMAT (Germany) (R. Valenti)

International Research Laboratory (France and Canada) (C. Proust, L. Taillefer and A.-M. Tremblay) **CIFAR** (Canada) (L. Taillefer)

Quantum Liquid Crystals (Japan) (T. Shibauchi)

Max Planck-UBC-U Tokyo (Germany, Canada, Japan) (A. Damascelli, H. Takagi)

European Microkelvin Platform (Europe-Wide) (C. Enss, S. Paschen, J. Saunders)

The key activities of the AccelNet program will include

- Internationally co-mentored postdocs (4 one-year positions per year)
- International Science Exchange program supporting science exchanges of up to six weeks.
- A Database for synthesis of quantum materials that will provide details of successful and failed attempts at quantum synthesis.



We would appreciate if you could post the attached flyer for this program and bring it to the attention of research groups at your ICAM institution.