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I2CAM and ICAM: Physics Internationally

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The Institute for Complex Adaptive Matter (ICAM) through the National Science Foundation sponsored International Institute for Complex Adaptive Matter (I2CAM) has, since its formal inception in 2002, grown into a 60+ branch international scientific network devoted to the study of emergent phenomena in correlated electron matter, soft matter, and biological matter. We nucleate forefront research through a blend of discussion oriented workshops (at least 50% of the time for discussion), exchange awards for junior scientists to initiate collaborations between two groups, travel awards for junior scientists to present research work or carry out brief research, and schools on topical subject matter. We also supplement our federal funding with contributions from each branch which support postdoctoral and senior scientist fellowships and unique science outreach activities such as an online science museum (The Emergent Universe). We have also outreach activities to universities with substantial numbers of underrepresented groups in the sciences and to outstanding science institutes in emerging nations. I will review what has worked well with ICAM/I2CAM, how we started and grew, and how we have inspired similar programs in other countries. (This research supported by NSF Grants DMR-0645461 and DMR-0456669).