## **FOREWORD**

The 12<sup>th</sup> International Workshop on RF Superconductivity (SRF2005) was held on the Cornell University campus in Ithaca, NY, USA from July 10 to 15, 2005. The Workshop was hosted by the Laboratory for Elementary-Particle Physics. More than 200 people from 14 countries attended the SRF2005 workshop.

Following the tradition of eleven previous workshops starting in 1980, the 12<sup>th</sup> workshop covered the latest advances in the science, technology and applications of RF superconductivity to particle accelerators and gave its participants a forum to discuss hot topics of the field and exchange ideas. The workshop was divided into tutorial sessions, invited review talks that covered the status of applications in-stream as well as exciting prospects for the future, and many aspects of SRF technology, as well as two afternoon poster sessions for contributed papers. A special session was devoted to doctoral dissertations on RF superconductivity topics and work of young researchers. Guided discussions on hot topics formed lively sessions where the workshop participants heard about many new developments. Most of the 196 oral and poster presentations were submitted for publication in these proceedings. The papers are arranged session by session as they were presented during the workshop. Papers presented show that RF superconductivity has become an important technology for accelerators and we hope that the SRF2005 workshop and publication of these proceedings will help in advancing the field.

We would like to acknowledge contributions from organizations and individuals that made this workshop and these proceedings possible. We are grateful to the International Program Committee and the Local Organizing Committee, to the session chairs and secretaries, to the LEPP Computer Group staff. Our sincere appreciation to the sponsors of the workshop, who provided funding for student travel grants and the awards. We would like to express our special thanks to Dr. Vadim Veshcherevich for photography and Vishal Patel and Jeanne Butler for help with producing these proceedings.

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