



Preface

The 15th International Workshop on Beam Cooling and Related Topics, COOL'25, was hosted by Stony Brook University (SBU) and Brookhaven National Laboratory (BNL), from the 27th to the 31st of October 2025. It was held at the Charles B. Wang Center on the campus of SBU on Long Island in New York state.

Forty-two oral contributions were presented in sessions covering all aspects of particle beam cooling, including status reports from existing and planned facilities.

As is custom since COOL'13, the Dieter Möhl medal was awarded to our colleagues who have made significant contributions to the field of beam cooling. This year four awards were given: two to early-stage researchers and two for lifetime achievements.

During the Brookhaven Lab tour, participants were able to visit the Collider-Accelerator Department and the Relativistic Heavy Ion Collider (RHIC), where they learned about the RF-based electron cooler for RHIC (LEReC) and the Coherent electron Cooling experiment. The workshop banquet took place on the North Shore of Long Island at the Old Field Club.

The organizers are grateful to the staff of the Charles B. Wang Center at SBU for their help in ensuring the success of the workshop.

Special thanks should be given to the local organizing committee members, Avril Coakley (SBU), Anna Petway (BNL), Christina Blas (BNL), and Bryan Callaghan (BNL), who prepared and managed the workshop with high efficiency and great enthusiasm.

A special mention should be made of our editors, Todd Satogata (Jefferson Lab) and Michaela Marx (DESY), for the publication of the workshop proceedings in the JACoW system and for their exceptional editorial work.

Finally, we would like to express our sincere appreciation to all the participants for their active participation in this workshop.

The next COOL workshop will be held in 2027, hosted by the Institute of Modern Physics in Huizhou, Guangdong Province, China. We look forward to seeing you there!

Vladimir Litvinenko (COOL'25 Chair)

Alexei Fedotov (COOL'25 Scientific Program Chair)