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“Days on Diffraction” is an annual conference taking place in May–June in St. Petersburg since 1968. The present 50<sup>th</sup> anniversary event is organized by St. Petersburg State University, St. Petersburg Department of the Steklov Mathematical Institute, the Euler International Mathematical Institute and the ITMO University.

More than 200 scientists came from different parts of the world to participate in “Days on Diffraction 2017”; the Organizing Committee thanks them all. Of special gratitude are the authors of extended abstracts submitted to the Proceedings; 65 of the papers (selected by peer-review) are published in the present issue.

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