Quantum chromodynamics and gauge theories in strong coupling at large continue their fast development which is strongly influenced by inputs from supersymmetric and string/branes theories. Plethora of ideas coming from these inputs as well as theoretical description of particular particles and processes, including condensed matter and cosmic objects, is a content of the biennial QCD workshops. The variety of topics and ideas discussed attracts leading experts in the field as well as new generation of young researchers. The workshop had 67 participants including locals and grad students. During three and a half days 43 talks were presented.

The first talk by K. Konishi (U. of Pisa) dwelled on connection between two- and four-dimensional quantum field theories. This connection is based on stringy objects – non-Abelian vortices. Related topics were discussed by K. Ohashi (U. of Pisa), S. Monin (grad student, U. of Minnesota), P. Bolokhov (U. of Minnesota, Duluth) and A. Yung (Petersburg Nuclear Physics Institute and FTPI). In his talk Yung showed that non-Abelian vortices can be identified with critical superstrings in 10 dimensions. S. Dubovsky (NYU) talked on a theory of QCD strings and S. Bolognesi (U. of Pisa) calculated string production in nonhomogeneous background. Topology and Dirac spectrum, J. Verbaarschot (Stony Brook U.), geometry of moduli spaces, A. Hanany (Imperial College, London), and instanton-torus knot duality, A. Gorsky (IITP RAS, Moscow), are developments involving interesting mathematics.

Various features of amplitudes in gauge theories were discussed by G. Korchemsky (Saclay), R. Roiban (Pensilvania State U.) and A. Belitsky (Arizona State U.). Confinement and deconfinement in QCD and elsewhere was a subject of talks by E. Shuryak (Stony Brook U.), E. Zhitnitsky (University of British Columbia) and E. Poppitz (University of Toronto). Applications of holography (gauge/gravity duality) were presented by L. Yaffe (U. of Washington), A. Armoni and E. Ereson (Swansea U.). Holography also appeared in considerations of thermalization and hydrodynamics: A. Ritz (U. of Victoria), P. Colangelo (INFN), M. Lublinsky (Ben-Gurion U.) and P. Koroteev (Perimeter Institute).

Resurgence – a very interesting approach to perturbative and nonperturbative expansions in QFT and Quantum Mechanics which goes beyond semiclassical methods – was presented by G. Dunne (U. of Connecticut), M. Unsal (N. Carolina U.) and G. Basar (U. of Maryland). Conformality and chiral features in gauge theories and in QCD, including lattice approaches, were also topics of active discussions: V. Braun (U. of Regensburg), A. Chernan (INT, U. of Washington), L. Glozman (U. of Graz), D. Kaplan (INT, U. of Washington), A. Monin (EPFL, Lausanne), Y. Meurice (U. of Iowa) and M. Cohen (U. of Mariland). Specific challenges in QCD, such as amplitudes of heavy hadron decays, T. Mannel and A. Khodjamirian (U. of Siegen), parton distributions, A. Radyushkin and I. Balitsky (JLab/ Old Dominion U.), hadronic wave function, A. Kovner (U. of Connecticut), were addressed together with such non-QCD problems as magnetic moment and decays of a bound lepton,
A. Czarnecki and R. Szafron (U. of Alberta). Even more exotic subjects such as quantum anti-ferromagnets, T. Sulejmanpasic (N. Carolina State U.), vertices in neutron superfluids, M. Nitta (Keio U., Japan), dense axion stars, E. Braaten (Ohio State U.) became a part of discussions.

Most of talks contained quite interesting new ideas and led to active discussions, often critical and sometimes very hot. This feature is a signature of CAQCD workshops which makes them attractive to participants, regular ones and newcomers. It is important to note the perfect logistics of the workshop at all stages -- invitations, web development, housing, banquet, etc. This is clearly due to Meghan Murray’s efforts, her remarkable job makes the organization quite simple for faculties.