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## Majorana neutrino mass generation, $0\nu\beta\beta$ -decay and nuclear matrix elements

Wednesday, 26 February 2020 11:00 (30 minutes)

: A Quark Condensate See-Saw (QCSS) mechanism of generation of Majorana neutrino mass due to spontaneous breaking of chiral symmetry accompanied with the formation of a quark condensate is presented. Consequencies of this scenario of neutrino mass generation for the neutrinoless double beta decay ( $0\nu\beta\beta$ -decay), tritium beta decay and cosmological measurements are drawn. The attention is paid also to the problem of reliable calculation of the  $0\nu\beta\beta$ -decay nuclear matrix elements and the evaluation of quenching of the axial-vector coupling constant  $g_A$ .

For solving of these nuclear physics problems an importance of experimental study of the two-neutrino double-beta decay, muon capture in nuclei and nuclear charge-exchange reactions is stressed.

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