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Measurements of the hadronic cross sections via ISR at Belle II

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A study of the hadrons production in e^+e^- annihilation at low energies provides important information about interactions of light quarks and spectroscopy of their bound states. Precise measurements of the total hadronic cross section, characterized by the ratio R , is needed for the calculation of the contribution of the hadronic vacuum polarization to the muon anomalous magnetic moment. It should be noted that at present the accuracy of the theoretical calculations of the muon ($g-2$) via the Standard Model is dominated by the precision of the hadronic contribution while an ambiguity in the theoretical results exists due to considerable difference between experimental data from different experiments. This reports describes status and prospects of the hadronic cross sections measurements at Belle II experiment via ISR approach. A measurement of the $e^+e^- \rightarrow \pi^+\pi^-\pi^0$ cross section in the energy range from 0.62 GeV to 3.5 GeV based on 191 fb^{-1} of integrated luminosity is considered in details.

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