

Detector instruments and technologies for Super Charm-Tau Factory in Novosibirsk

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The Super Charm-Tau Factory is an electron-positron collider experiment in the center of mass energy range from 2 to 6 GeV with peak luminosity $10^{35} \text{ cm}^{-2} \text{ s}^{-1}$. The luminosity is 100 times higher than at BES-III experiment will be provided due to implementation of Crab-Waist scheme of collision and submillimeter vertical beta-function. Also the high level of longitudinal electron beam polarization in the interaction point is foreseen in the whole operation energy range. Concept of accelerator complex and preliminary physics program of the experiment is presented. R&D for some detector systems has been started at Budker Institute of Nuclear Physics and at some other Institutes in the world as well. Description of detector systems, consideration of different options and detector technologies for the experiment are given. Status of R&D for detector subsystems including simulation and prototyping are presented.

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