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## Mechanical design, structural requirements and optimization of the FCC e+e- interaction region components

*Thursday, 23 May 2024 16:00 (2 hours)*

This paper describes the mechanical design of the Future Circular Collider e+e- interaction region. The Future Circular Collider, as a forefront particle accelerator project, demands meticulous attention to the mechanical integrity and performance of its components, to the integration of the different systems and to the respect of the spatial constraint. The vacuum chamber design, the support tube and the bellows design are reported, highlighting the solutions adopted. The structural optimization method of the support structure is also presented, as well as the results obtained.

### Footnotes

### Funding Agency

### Paper preparation format

Word

### Region represented

Europe

**Primary author:** FRANCESINI, Francesco (Istituto Nazionale di Fisica Nucleare)

**Co-authors:** NOVOKHATSKI, Alexander (SLAC National Accelerator Laboratory); DI PASQUALE, Enrico (Istituto Nazionale di Fisica Nucleare); BOSCOLO, Manuela (Istituto Nazionale di Fisica Nucleare); VALENTINI, Pier Paolo (Università di Roma Tor Vergata); LAUCIANI, Stefano (Istituto Nazionale di Fisica Nucleare)

**Presenter:** FRANCESINI, Francesco (Istituto Nazionale di Fisica Nucleare)

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