

# COLLOQUIUM DFA

IN PRESENCE AULA ROSTAGNI  
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## The Muon Collider Status

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**Abstract:** The muon collider concept promises a unique path toward high-energy lepton collisions with high luminosity. The concept has to face a number of challenges that stem from the very short lifetime of the muon.

The talk will give an overview of the collider concept, its benefits as well as its design and technology challenges. It will give a summary of the status of the work and also touch on the development of the International Muon Collider Collaboration.



**Daniel Schulte** received his PhD from Hamburg University (Doktorvater B. Wiik) for work on the Machine-detector Interface of the TESLA Linear Collider.

He then worked at CERN, initially as a fellow and later as staff.

Since 1997 he has been working on beam dynamics in CLIC (linac, ground motion effects, magnetic stray fields, ...). He also contributed to the CLIC physics study (beam-beam, background, luminosity spectrum, ...).

He still is in charge of the CLIC design and parameters.

From 2004 on, he in addition worked on electron cloud in the future LHC and also impedances.

From 2012-2020, he has been in charge of the FCC-hh collider ring.

Since 2019, he is working on the muon collider, initially as interim study leader and since 2022 as study leader.

Other activities were ILC, LHeC, FCC-ee and plasma-based colliders.