



# Software for PED studies

# Introduction

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FCC Software Meeting  
CERN, Zoom

Jun 26, 2023  
G Ganis, CERN-EP

# Recent activities



- FCC Week 2023, London

- Joint Detector Concepts and Software session, contribution to Phys Perf session
  - Good overall reception: recognized significant progress towards the implementation of the three detector concepts under study; Interesting discussions after all talks
  - A general software status talk was missing

- Start of by-weekly meeting to organize work around full simulation and reconstruction

- Scope: detector implementation, simulation, digitization, reconstruction and performance
  - Working meeting: issues faced, lesson learned, status report, questions, unpolished plots, ...
- Category: <https://indico.cern.ch/category/16938/> (E-group: **FCC-PED-SoftwareAndComputing-Full-Simulation**)

- ECFA workshops

- [Generators](#), 21-22 June, Brussels
  - interesting discussions on how to address future precision challenges
- Reminder: [Reconstruction](#), 11-12 July, CERN

# Software Talks at FCC Week 2023 in London



[Tue Jun 6](#)

**10:30** → 12:00 PE&D: Physics Case + Theoretical calculations (II)

**11:30** **Latest developments in FCC Analysis** †

Speaker: **Juraj** Smiesko (CERN)

**13:30** → 15:00 PE&D: Software and Computing / Detectors

[Thu 8 Jun](#)

**13:30** **Status of software for detector studies**

Speaker: **Brieuc** Francois (CERN)

**13:50** **IDEA vertex and drift chamber in Key4hep** †

Speaker: Armin Ilg (University of Zurich)

**14:10** **RICH full sim implementation in Key4hep**

Speaker: Alvaro Tolosa Delgado (CERN)

**14:30** **IDEA Dual readout calorimeter in Key4hep**

Speaker: Sang Hyun Ko (Seoul National University (KR))

**14:45** **FCC-ee TileCal simulation and reconstruction**

Speaker: Michaela Mlynarikova (CERN)

# Today's meeting





**FUTURE CIRCULAR COLLIDER**

## FCC Software Meeting

Monday 26 Jun 2023, 15:00 → 18:00 Europe/Zurich  
4/S-020 (CERN)

Videoconference  FCC Software Meeting [Join](#) 4/S-020

Registration  You are registered for this event. [Check details](#)

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<b>15:00</b>	→ 15:20	<b>Status of things</b>	🕒 20m	📄
		Speaker: Gerardo Ganis		
<b>15:20</b>	→ 15:50	<b>Status of CLD tracking</b>	🕒 30m	📄
		Guidance on what to use, known issues/tricks, what results you can get in term of reconstructed tracks		
		Speaker: Leonhard Reichenbach (University of Bonn (DE))		
<b>15:50</b>	→ 16:20	<b>FCC@iLCDirac</b>	🕒 30m	📄
		Status of tools. Comparison with current workflow. Next steps		
		Speakers: Andre Sailer (CERN), Lorenzo Valentini (Universita e INFN, Padova (IT))		
<b>16:20</b>	→ 16:40	<b>AoB</b>	🕒 20m	📄
		Speaker: All		

# Next meeting



- July 31st
  - Developing agenda: <https://indico.cern.ch/event/1300411/>
- Proposals for contributions welcome