

# FCC-ee injector collaboration

## WP1 introduction and structure

Alexej Grudiev

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# WP1 structure

## WP1. e+/e- 6 GeV Injector Linacs - A. Grudiev, J.-Y. Raguin

### Task 1.1 Single or two guns schemes: DC-Gun/RF Gun design and comparative studies – S. Doeber

CERN: Steffen Doeber, CERN student

PSI: J.-Y. Raguin + PSI Staff (new person)

### Task 1.2 RF-structure optimization for the linac 1, 2 and 3 based on beam dynamics analysis (Task 1.3) – A. Grudiev

CERN: A. Grudiev, CERN fellow

PSI contact person: J.-Y. Raguin

### Task 1.3 Electron optics and transport optimization including collective effects in Linac 1, 2 & 3 – P. Craievich

CERN: A. Latina

PSI: P. Craievich with support from BD, PSI Staff (new person)

### Task 1.4 RF modules design and costs (gun, Linac 1, 2 and 3); cost estimates based on SwissFEL prices – J.-Y. Raguin

CERN: A. Grudiev, CERN fellow

PSI: J.-Y. Raguin + PSI Staff (new person)

**CERN E-group:  
FCCee-injectors-collaboration-WP1**

PEDROZZI, Marco

RAGUIN, Jean-Yves

ZENNARO, Riccardo

BREZINA, Tomas (BE-RF-MK)

CRAIEVICH, Paolo (ATS-DO)

DOEBERT, Steffen (BE-RF-MK)

GRUDIEV, Alexej (BE-RF-LRF)

LATINA, Andrea (BE-ABP-LAT)

POMMERENKE, Hermann Winrich (BE-RF-LRF)

Is anybody missing?

#### Task:1.1 S. Doebert

- CERN
  - Steffen Doeber
  - Tomas Brezina
- PSI
  - Jean-Yves Raguin
  - PSI staff (name?)

Design of the e-source:

- RF gun up to 5-10MeV
- DC gun up to ? MeV

#### Task:1.2 A. Grudiev

- CERN
  - Alexej Grudiev
  - Hermann Pommerenke
- PSI
  - Jean-Yves Raguin

RF design of the linacs:  
Injector, L1, L2

#### Task:1.3 P. Craievich

- PSI
  - Paolo Craievich
  - PSI staff (name?)
- CERN
  - Andrea Latina

BD design of the linacs:  
Injector, L1, L2

#### Task:1.4 J.-Y. Raguin

- PSI
  - Jean-Yves Raguin
  - PSI staff (name?)
- CERN
  - Alexej Grudiev
  - Hermann Pommerenke

Tech. Design of the RF modules  
RF source, WG network, PC, AS  
and costs

