

# FCC-ee: An Electroweak factory.

#### Tuesday, 13 March 2018, DESY Auditorium, 16:45 h

### Alain Blondel (Geneva University)



The FCC-ee is included in the context of the Future Circular Collider Design study, where several colliders will occupy in succession the same 100km circular infrastructure. The e+e- collider combines the experience acquired on LEPI and LEPII with that of the B-factories, to achieve extremely high luminosities at the Electroweak scale. A 15-years run plan allows to collect 5  $10^{12}$  Z,  $10^8$  WW events,  $10^6$  ZH events and ttbar events. In addition it provides exquisite center-of mass energy definition (100 keV) for the measurements of the Z and W properties. The facility and its discovery potential, through observation of new particles, new phenomena and precision measurements, will be described. The feasibility of such a facility is well established now. A number of performance enhancing or cost optimizing studies that remain to be done before construction will be described.

#### Coffee, tea and cookies will be served at 16:30h

## • After the colloquium there is a chance for private discussions with the speaker over wine and pretzels

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