

# Other open points (incomplete list)

- **Maintaining knowhow** from LEP, PEP-II and (Super-)KEKB and preparing for FCC
- **Injection scheme for booster and pre-booster** - how many wigglers, **how much SR power?**
- **Emittance evolution from source to collider, incl. IBS** in all rings, injection effects, etc.
- **E-cloud** build up and effects, e-cloud plus beam-beam, **ion-driven instability for all rings**
- **Touschek effect**, scattering off thermal photons, **gas scattering in all machines**
- **Modelling of beam tails – collimation and protection systems**
- **Dust effects** in the collider, esp. in the electron ring (quench? background? abort?)
- **Injection energy for the full-energy booster**, field quality, dynamic aperture etc.
- **Damping Ring dynamic aperture and capture efficiency for simulated e+ distributions**
- **Integration of longitudinal dynamics codes & plasma acceleration codes**
- **Optics modelling, esp. IR and the solenoid, fringe fields** – are we there ? Can we learn from other ABP sections (e.g. sources and linacs) ?
- **Alternative emittance calculations**, e.g. Hirata-Ohmi-Oide formalism, ... tracking ?....
- Development of **advanced feedback system against low-mode res.-wall. instability**
- **Impedance calculations** - many components to be considered and added
- - **nonlinear wake fields, e.g., at the collimators ; CSR**
- - computing challenges, e.g. those encountered by Sasha Novokhatski

# ABP FCC Day + FCCIS WP2 Workshop Dinner

Today 19h00 at Luigia in Vernier  
(almost walking distance from gate C)

We meet there ?

If you need a ride or guidance please send me an email