Dielectron next steps

Electrical conductivity

- **Physics motivation** (Stefan Floerchinger and Ralf Rapp)
- **Compare:**
  - Signal (Stefan Floerchinger and Ralf Rapp ?)
  - Hadronic cocktail (Klaus Reygers, Sebastian Scheid, Raphaelle Bailhache)
  - Physics background form UPC (Kai Schweda, Georgijs Skorodumovs)
  - Combinatorial background with inner TOF and B = 0.2 T (possible bachelor student, Sebastian, Raphaelle depending on the outcome of above)

Goal: clarify the differences between different calculations/background estimations

Write-up our current understanding

Thermal, pre-equilibrium dielectrons
Chiral symmetry restoration

- **Physics motivation** (Ralf Rapp, Gojko Vujanovic, S. Schlichting)
- **Goal:**
  - Compare different approach in the models (missing discussion this week) (Ralf Rapp, Gojko Vujanovic, S. Schlichting)
  - Update ALICE 3 feasibility studies (Taku, Sebastian, Zafar, Raphaelle)

Goal: Write-up current motivations and expected detector performances

Back-up

Thermal, pre-equilibrium dielectrons
Chiral symmetry restoration

- **Expanding fireball model with hadronic many-body theory**
  from Ralf Rapp et al. (Hendrik van Hees here) (yield until now)
  R. Rapp, Adv. High Energy Phys. 2013 (2013) 148253
  P.M Hohler and R. Rapp, Phys. Lett. B 731 (2014) 103
- **Thermal radiation from hadron-gas and QGP + decays** (yield and v2)
  from Gojko Vujanovic et al (arxiv:1903.05078 and arxiv:1702.02941)
- **Pre-equilibrium and thermal radiation from QGP** (yield)
  from M. Coquet X. Du J-Y Ollitrault S. Schlichting M. Winn
  Physics Letters B Volume 821, 10 October 2021, 136626, arXiv:2112.13876