## 4th European Advanced Accelerator Concepts Workshop



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## Numerical calculation of the Purcell-Smith radiation from dielectric laser acceleration (DLA) structures

Monday, 16 September 2019 19:00 (1 hour)

Intensities of the Purcell-Smith radiation from DLA-compatible grating and pillar structures are calculated numerically using the finite-element method. Geometric parameters are scanned in search of resonant radiation enhancement [1].

[1] Yi Yang et al, Maximal spontaneous photon emission and energy loss from free electrons, Nature Physics 14, 894–899 (2018)

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**Presenter:** SZCZEPKOWICZ, Andrzej (University of Wroclaw) **Session Classification:** Cheese and Wine Poster Session 1

**Track Classification:** WG3 - Electron beams from electromagnetic structures, including dielectric and laser-driven structures