

Applications of Crystals and Nanotubes for Acceleration and Manipulation, 11-12 March HYBRID Workshop (65% Virtual)



10 live participants

19 remote participants

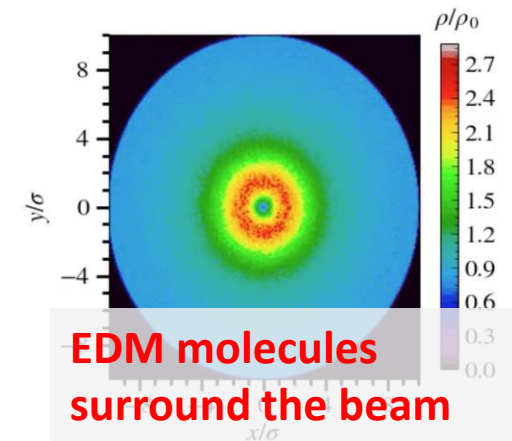
live → hybrid → virtual

Trapping of Neutral Molecules or Flakes with EDM or MDM by the Electromagnetic Beam Field - ARIES joint GSI-CERN-KEK study motivated by LHC "16L2" phenomenon

paramagnetic and polar air molecules

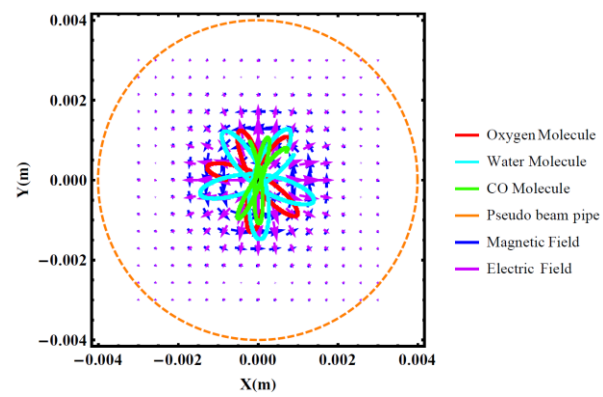
Molecule	EDM [D]	MDM [BM]	m [amu]
H ₂ O	0.39	0	18
O ₂	0	2.8	32
CO	0.025	0	28
N ₂	0	0	28
CO ₂	0	0	44

simulated distribution of EDM molecules around LHC beam

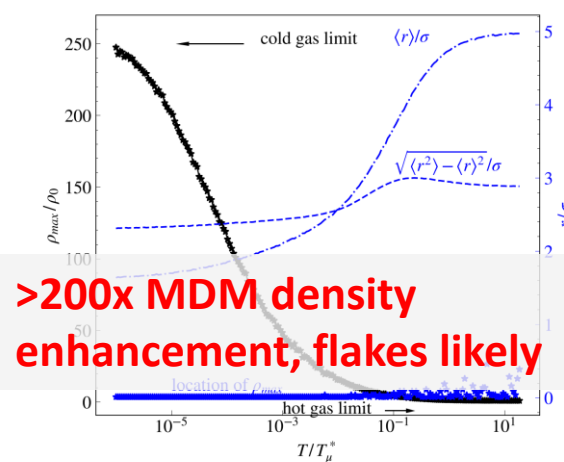


EDM molecules surround the beam

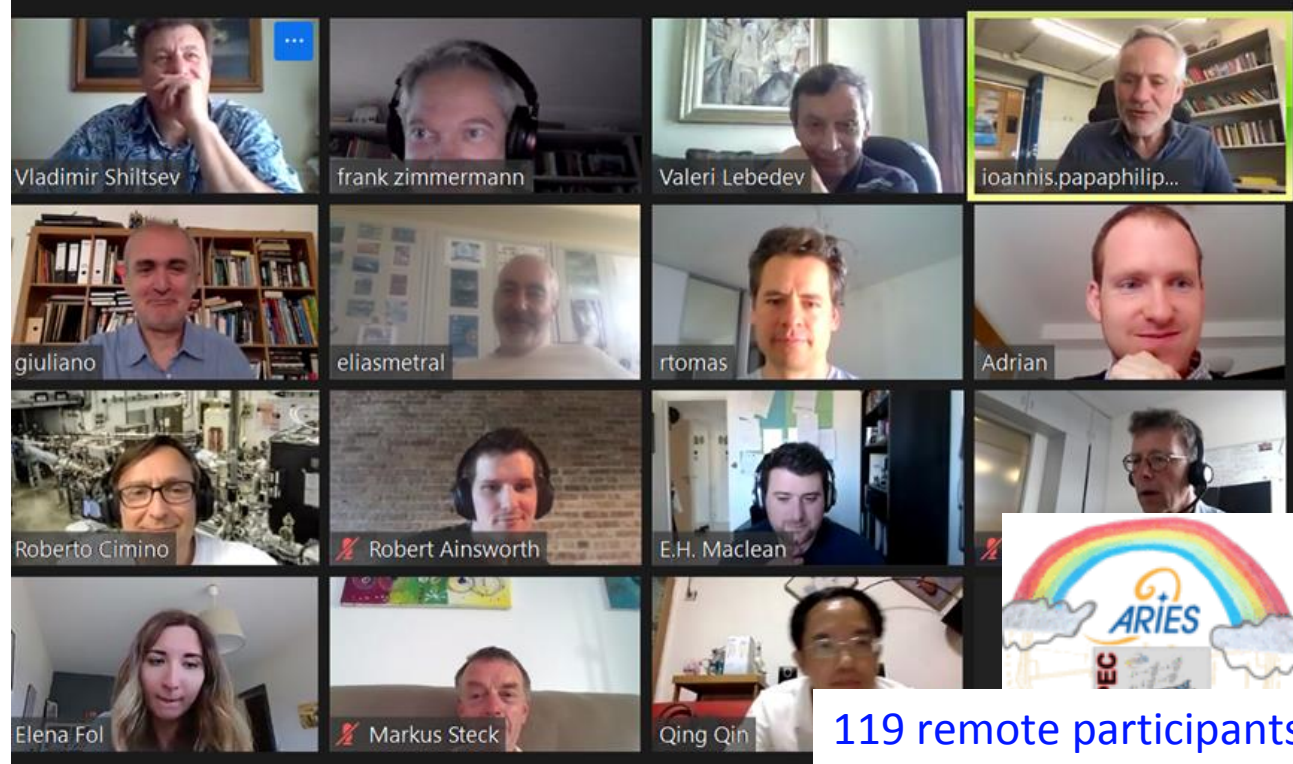
motion of EDM & MDM molecules



variation of radial density distribution of EDM molecules with normalized temperature



Mitigation Approaches for Hadron Storage Rings and Synchrotrons 22 June to 1 July - 100% VIRTUAL Workshop



119 remote participants

