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Modeling charged particles around dual jets from coalescing binary black holes MATT KINSEY, TANJA BODE, JAMES HEALY, PABLO LAGUNA, DEIRDRE SHOEMAKER, Georgia Institute of Technology — Electromagnetic emission produced during the in-spiral and merger of supermassive black holes could provide, together with gravitational waves, the smoking gun to identify these astrophysical events. To gain further insight on the mechanisms responsible for the electromagnetic emission, we present results from simulations of pressure-less charged matter in the vicinity of merging black holes immersed in a magnetic field. In particular, we discuss the effect that the dual jets from coalescing binary black holes have on the dynamics of the charged particles.

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