

Abstract Submitted  
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**Hot accretion flows onto binary and single black holes** ROMAN GOLD, Univ of Maryland-College Park, VASILEIOS PASCHALIDIS, Princeton University, MILTON RUIZ, STUART SHAPIRO, University of Illinois at Urbana-Champaign, ZACHARIAH ETIENNE, West Virginia University, HARALD PFEIFFER, Canadian Institute for Theoretical Astrophysics, JONATHAN MCKINNEY, Univ of Maryland-College Park — Accreting black holes (BHs) are at the core of relativistic astrophysics as messengers of the strong-field regime of General Relativity and prime targets of several observational campaigns, including imaging the black hole shadow in SagA\* and M87 with the Event Horizon Telescope. Binary Black Holes are one of the most promising gravitational wave sources for adLIGO and Pulsar Timing Arrays and – if accreting – can provide a strong electromagnetic counterpart. I will present results from global GRMHD simulations of both single and binary BHs embedded in a hot, magnetized disk, highlighting differences in their observational appearance including their gravitational and electromagnetic radiation.

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