Luis Lehner\* (llehner@perimeterinstitute.ca), 31 Caroline St, N., Waterloo, Ontario N2L 2Y5, Canada. Binary black hole as engines of both gravitational and electromagnetic emissions.

Black holes are among the most extreme gravitational objects known. Binary systems composed of black holes are not only copious emitters of gravitational radiation but also can affect nearby fields (describing matter or electromagnetic energy) and induce different emission mechanisms. The current talk discusses some of these possibilities and present results from simulations incorporating general relativity, magnetohydrodynamics and electrodynamics. (Received August 25, 2009)