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Production of X(3872) in Ultra Relativistic Heavy Ion Collisions¹ MATTHEW SIBILA, Ohio Northern University, RALF RAPP, XIAOJIAN DU, Texas A and M — The X(3872) particle, discovered in 2003 by the Belle collaboration, is of particular interest due to its structure being either a tetra-quark bound state or a molecular state. Its structure can be understood via an investigation of its production yields and spectra in Ultra Relativistic Heavy Ion Collisions (URHICs). We calculate the yields with a statistical hadronization model evaluating at either chemical freeze-out or kinetic freeze-out. The calculation is further extended with a rate-equation approach with its temperature-dependent hadronic width, accounting for its off-equilibrium production. Furthermore, the transverse-momentum spectra can be evaluated from a blastwave description.

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