

1 Prospects of Dielectron Measurements with
2 STAR BES-II

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4 Detailed studies of the dielectron mass spectrum in relativistic heavy-ion
5 collisions can help to disentangle its various physics sources. In the intermediate
6 mass range (IMR, $M_\phi < M_{ee} < M_{J/\Psi}$), dielectrons from thermal radiation can
7 serve as a thermometer of the QGP. In the lower-mass range (LMR), the in-
8 medium modification of ρ meson mass spectrum could provide an access for
9 chiral symmetry restoration. Furthermore, dielectrons at the very low mass
10 range will provide another opportunity to measure direct photons.

11 Large event samples and improved detection capabilities with Beam Energy
12 Scan phase-II (BES-II) bring STAR in an excellent position to complete its
13 LMR scan and for the first time extract the QGP temperatures from the IMR.
14 In this talk, I will discuss the prospects of STAR's BES-II dielectron program
15 and review some recent results.