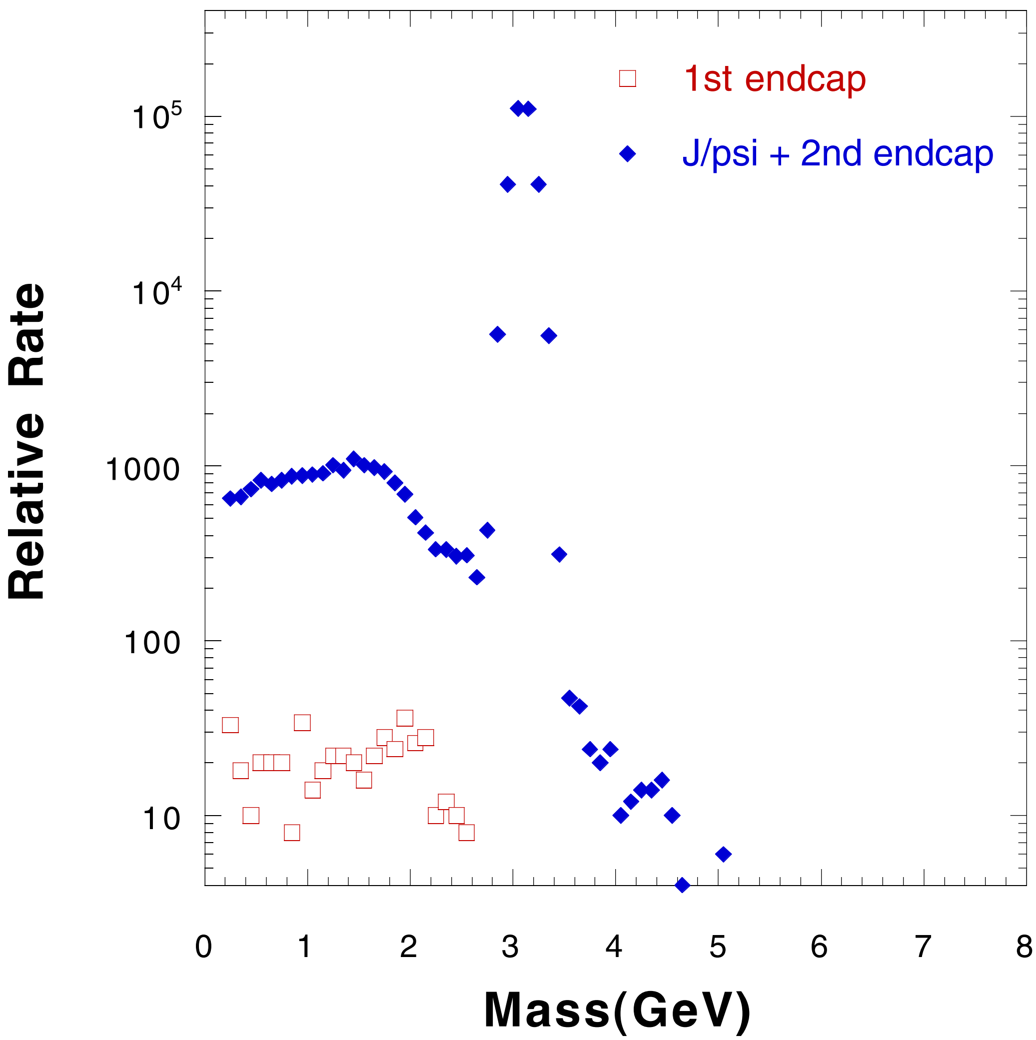

Figure 15. Simulation of J/ψ events and pion decay background at $\sqrt{s}$ = 50 GeV. The upper (diamond) points are events accepted in the second muon arm with no hadron-absorbing "nosecone" placed before the central magnet pole tip. The lower points show the pion decay background only in the first muon arm in the configuration of the PHENIX conceptual design report (includes the nosecone, neutron shield, and Pb photon/electron shield). The simulations were performed with PISA[41], using the pion production cross sections from Alper et al.[42].