High Rapidity Physics with the BRAHMS Spectrometer

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The BRAHMS collaboration has completed its program of studies of particle production in a wide range of rapidities from all beams collided at RHIC ranging from p+p, Cu+Cu and Au+Au at different energies (62.4 and 200 GeV). This contribution will put the emphasis on the results obtained at the highest rapidity and make use of nuclear modification factors R_{AA}, R_{dA} and R_{CP} for fully identified particles as well as baryon/meson ratios to try to shed light on the interplay of modifications to the initial wave function of the colliding beams, the effects of the new highly opaque medium formed after the collision of heavy ions, and finally the continued coupling that may occur between partons as they fragment into sets of on-shell particles. We will also discuss BRAHMS results in the context of the recently emphasized effect of the diffuseness of the colliding nuclei [1] within different centrality sets of data.

References

[1] Klaus Werner arXiv:hep-ph/0603064.