In this talk we reviewed the theoretical models which try to address the rapid thermalization observed at RHIC experiment. The quark-gluon plasma produced at RHIC is stronly coupled. Therefore the models based on AdS/CFT seem relevant to study this experiment. In fact thermalization which is a far from equilibrium process is dual to black hole formation in the gravity dual to holographic CFTs. To study the holography of out of equilibrium systems and also RHIC experiment one can use the reviews:

- V. E. Hubeny and M. Rangamani, "A Holographic view on physics out of equilibrium," Adv. High Energy Phys. **2010**, 297916 (2010) [arXiv:1006.3675 [hep-th]].
- J. Casalderrey-Solana, H. Liu, D. Mateos, K. Rajagopal and U. A. Wiedemann, "Gauge/String Duality, Hot QCD and Heavy Ion Collisions," arXiv:1101.0618 [hep-th],

accordingly. The basic papers in this topic are:

- S. Bhattacharyya and S. Minwalla, "Weak Field Black Hole Formation in Asymptotically AdS Spacetimes," JHEP **0909**, 034 (2009) [arXiv:0904.0464 [hep-th]].
- P. M. Chesler and L. G. Yaffe, "Boost invariant flow, black hole formation, and far-from-equilibrium dynamics in N = 4 supersymmetric Yang-Mills theory," Phys. Rev. D **82**, 026006 (2010) [arXiv:0906.4426 [hep-th]].

A good paper to study the probes of thermalization in holographic plasmas is:

- V. Balasubramanian *et al.*, "Holographic Thermalization," Phys. Rev. D **84**, 026010 (2011 [arXiv:1103.2683 [hep-th]].