SLAVA RYCHKOV, I.H.E.S. (Bures-sur-Yvette) and Ecole Normale Superieure (Paris) Conformal Field Theory and Critical Phenomena in d=3

I will review the recent progress in understanding the critical phenomena in d=3 dimensions using the conformal bootstrap approach. In particular, I will discuss results about the critical point of the 3d Ising Model and the O(N) models.