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The standard and extensively used method for generating artificial networks is the LFR graph generator. This model has some scalability limitations and it is challenging to analyze it theoretically. Moreover, the main parameter of the model guiding the strength of the communities, has a non-obvious interpretation and so can lead to unnaturally-defined networks. In this talk we provide an alternative random graph model with community structure and power-law distribution for both degrees and community sizes, the Artificial Benchmark for Community Detection (ABCD graph). We show that the new model solves the issues identified above. Indeed, it is fast, simple, and can be easily tuned to allow the user to make a smooth transition between the two extremes: pure (independent) communities and random graph with no community structure. In the presentation we discuss the properties of the algorithm and its scalability both in serial and parallel implementations. (Received September 11, 2020)