Complex networks gradus ad parnassum

R. Fabbri[a)]

(Dated: 5 May 2015)

Complex networks have received much attention from the academic community in the past decade, with impacts in both science and society. Even so, comprehensive guides are usually lengthy and unaccessible to non-specialists. This text presents the subject and vocabulary issues in literature, the paradigmatic models and their typical measures. A discussion about the ubiquity of network structures, and our own existence as networks, should ease the reader to grasp essential and useful concepts. Metrics, software, related work and exercises are in the Appendixes.

PACS numbers: 01.30.Rr, 05.65.+b, 89.75.Kd, 89.75.Fb
Keywords: complex networks, statistical physics, tutorial

[a)] Also at São Carlos Physics Institute of Physics, University of São Paulo.