1151-20-154 **Vladimir Shpilrain*** (shpilrain@yahoo.com). *Computing with errors.* Preliminary report.

Complexity measure of an algorithm has evolved from the worst-case complexity to the average-case complexity (Levin, 1986) to the generic-case complexity (Kapovich-Myasnikov-Schupp-Shpilrain, 2003). At the same time, the idea of coarse computability was emerging and recently formalized by Jockusch and Schupp. We take the ideas of coarse and generic computability further and consider algorithms that are allowed to give a wrong answer with some controlled probability, converging to 0 under an appropriate stratification. We illustrate these ideas using the word problem for finitely presented groups as an example. (Received August 16, 2019)