**NARROMI** is software for improving accuracy of GRNs inference. It’s a novel method combining ordinary differential equation based recursive optimization (RO) and information-theory based mutual information (MI). In this algorithm, both noisy regulations with low pair-wise correlations and redundant regulations from indirect regulators are removed by measuring MI and implementing RO, respectively. In particular, it’s the first one to handle the redundancy problem in GRNs for model based network inference methods.