res v.s. time, res0=7.70e-01 time ratio: aa1 = 2.89e+00, aa1-safe = 1.99e+00104 aa1 aa1-safe original 10<sup>2</sup>  $\|g(x^k)\|_2/\|g(x^0)\|_2$  $10^{-4}$ 10<sup>-6</sup> 2 6 8 4 time (seconds)