Table 1: ellipse convergence, dim $\in \{2, 500\}$; a = randi([1, 3], dim, 1), z = randi([4, 6], dim, 1)

| No of iter	$\|x^i - x^*\|_{dim=2}$	$\|x^i - x^*\|_{dim=500}$
1	2.243221e+00	2.235629e-01
2	2.529298e-01	1.885714e-03
3	1.596291e-01	4.097499e-05
4	5.994882e-02	9.562885e-07
5	3.456075e-02	2.280492e-08
6	1.333884e-02	5.469444e-10
7	7.527956e-03	5.469444e-10
8	2.936353e-03	5.469444e-10
9	1.649361e-03	5.469444e-10
10	6.449837e-04	5.469444e-10
11	3.619134e-04	5.469444e-10
12	1.416068e-04	. . .
13	7.944030e-05	
14	4.456092e-05	
15	2.499723e-05	
16	1.402219e-05	
17	7.865885e-06	
18	4.412401e-06	
19	2.475169e-06	
20	1.388460e-06	
21	7.788655e-07	
22	4.369092e-07	
23	2.450870e-07	
24	1.374830e-07	
25	7.712197e-08	
26	4.326204e-08	
27	2.426811e-08	
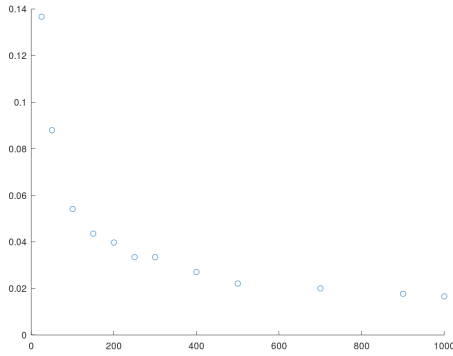
(a) scatter
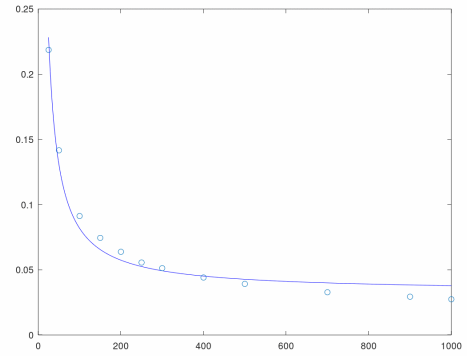

(b) fit $f(x) = \frac{a}{x} + b$, $a = 4.8823$, $b = 0.03297$

Figure 1: Dependence between harmonic mean of $\frac{\|x_{i+1}-x^*\|_\infty}{\|x_i-x^*\|_\infty}$ averaged by i (y) and dimension (x)

Table 2: parabola convergence, dim $\in \{3, 500\}$; a = randi([1, 2], dim - 1, 1), z = randi([100, 150], dim, 1)

No of iter	$\|x^i - x^*\|_{dim=3}$	$\|x^i - x^*\|_{dim=500}$
1	2.228914e+01	1.327192e+02
2	1.919121e+04	4.737872e+06
3	4.633022e+03	1.184194e+06
4	9.938165e+02	2.957739e+05
5	8.627311e+01	7.366889e+04
6	1.269831e+02	1.814254e+04
7	5.423350e+01	4.260911e+03
8	8.769201e+00	7.909625e+02
9	2.493897e+01	7.340416e+01
10	8.634920e+00	2.733732e+02
11	6.899482e-02	7.863157e+01
12	1.840310e+00	2.730492e+00
13	8.839115e-01	1.181922e+01
14	4.068456e-01	4.496756e+00
15	1.684220e-01	8.712053e-01
16	4.890502e-02	9.326745e-01
17	1.153985e-02	3.147826e-02
18	1.869022e-02	1.320418e-01
19	3.567081e-03	5.027553e-02
20	4.000842e-03	9.396821e-03
21	4.000842e-03	3.939831e-02
22	4.000842e-03	1.500086e-02
23	4.000842e-03	1.500086e-02
24	. . .	. . .
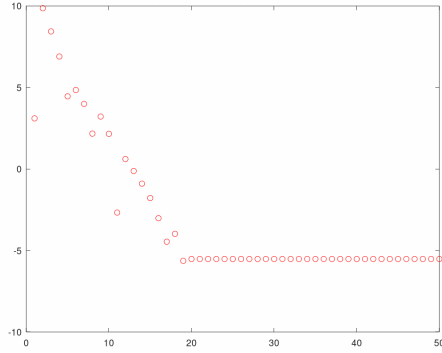
(a) scatter, log-space by (y), dim = 3
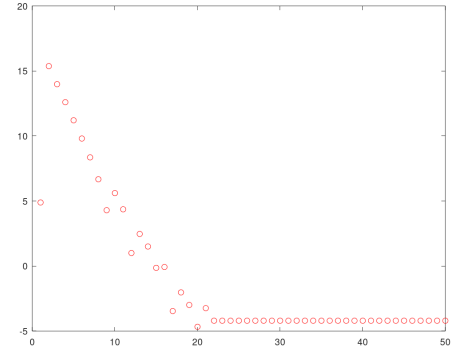
(b) log-space by (y), dim = 500

Figure 2: Dependence between $\|x_i - x^*\|$ (y) and a number of iterations (x)