Programación cuadrática con el método de Mehrota

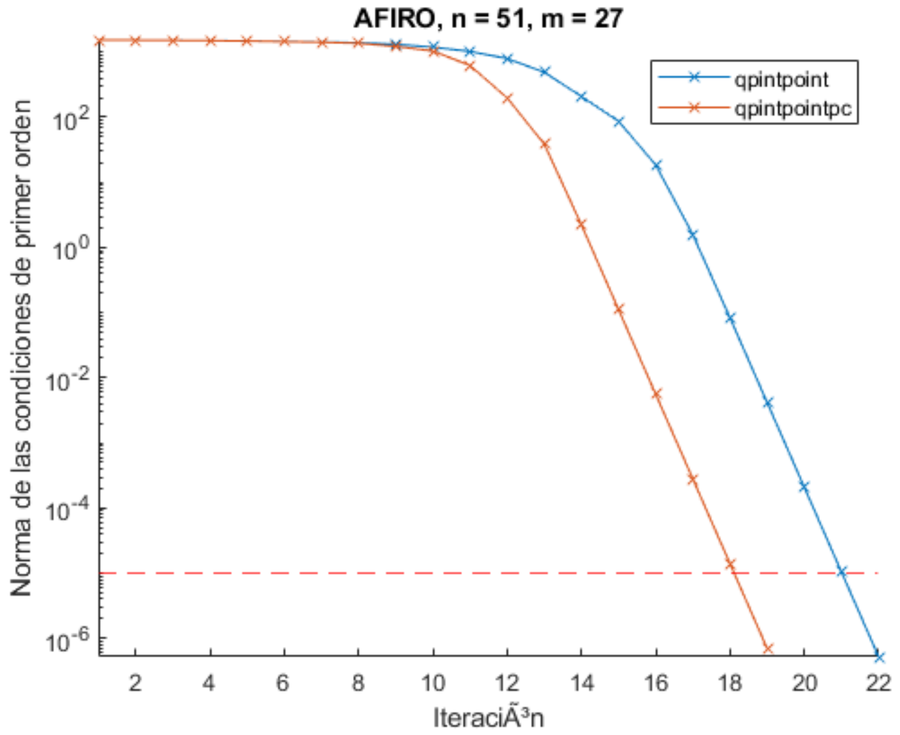
Mónica Alba González
Miguel González Borja
Jorge Rotter Vallejo

AFIRO

$$n = 51$$

$$m = 27$$

	qpintpoint_full	qpintpoint	qpintpointpc_full	qpintpointpc	quadprog
Iteraciones	29	21	18	18	7
Tiempo (s)	0.021026	0.016536	0.028907	0.036616	0.058853
Valor de la función	2.0082E+05	2.0082E+05	2.0082E+05	2.0082E+05	2.0082E+05
Sistema completo	-	1	-	0	-
Convergencia	✅	✅	✅	✅	✅

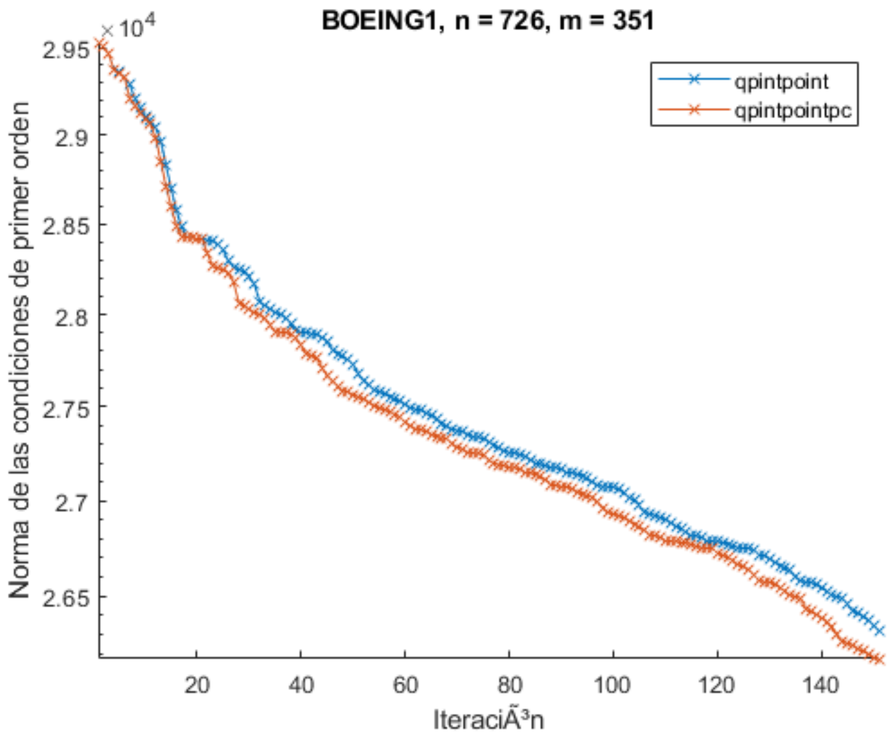


BOEING1

$$n = 726$$

$$m = 351$$

	qpintpoint_full	qpintpoint	qpintpointpc_full	qpintpointpc	quadprog
Iteraciones	150	150	150	150	150
Tiempo (s)	30.539	20.984	60.288	21.684	2.5559
Valor de la función	1.7284E+08	1.763E+08	1.7182E+08	1.7182E+08	4.158E+06
Sistema completo	-	60	-	23	-
Convergencia	✗	✗	✗	✗	✗

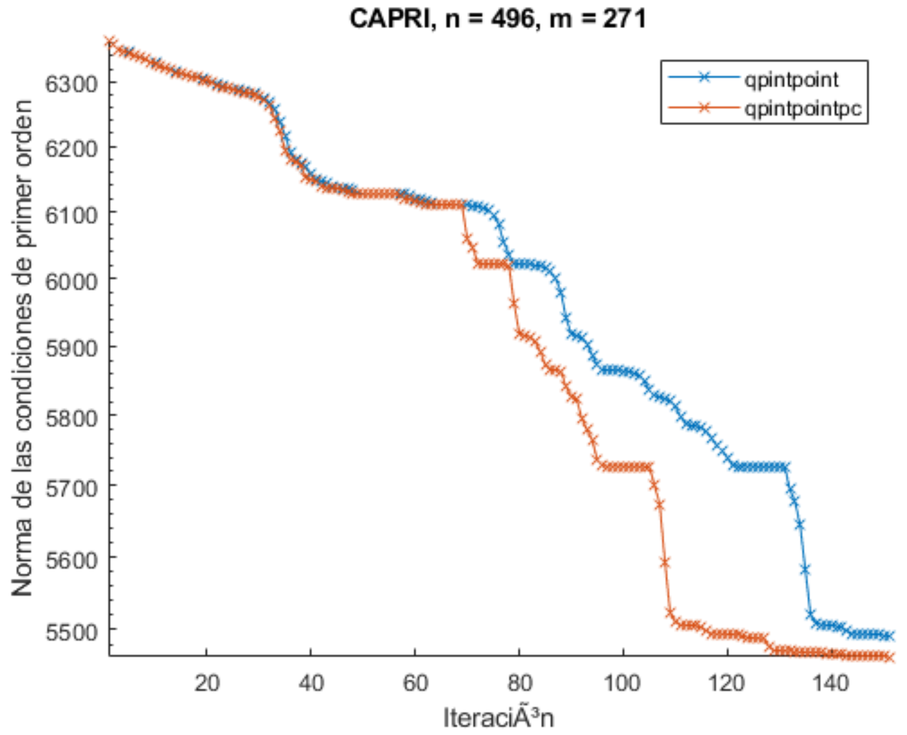


CAPRI

$$n = 496$$

$$m = 271$$

	qpintpoint_full	qpintpoint	qpintpointpc_full	qpintpointpc	quadprog
Iteraciones	150	150	150	150	150
Tiempo (s)	12.779	7. En 7676	24.713	12.554	0.27425
Valor de la función	1.035+e07	1.0297+e07	1.0354+e07	1.0354+e07	9.3979+e07
Sistema completo	-	52	-	49	-
Convergencia	❌	❌	❌	❌	✅

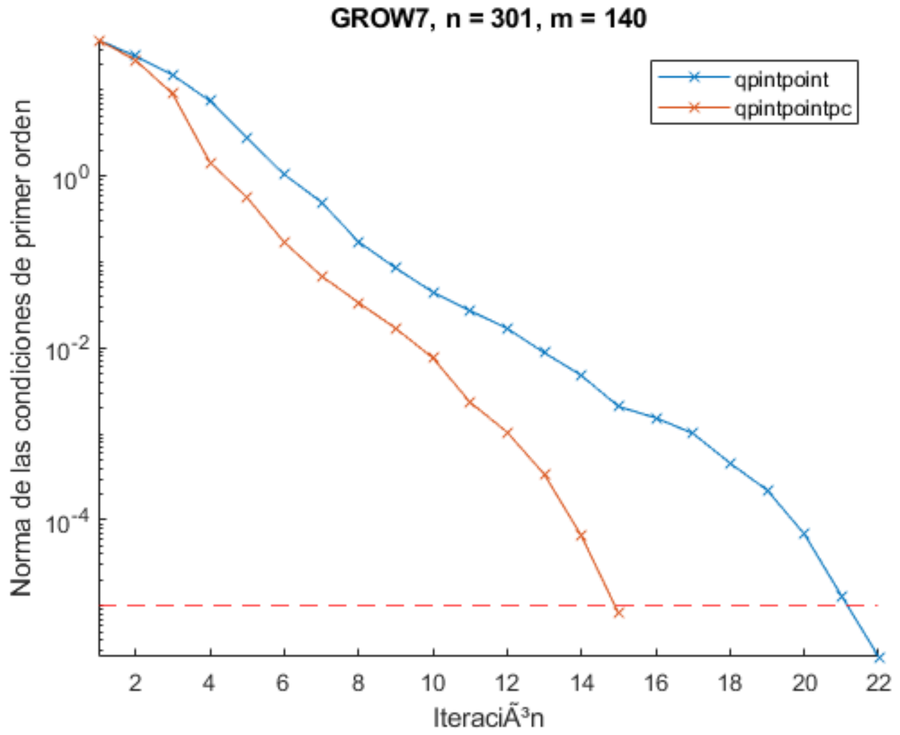


GROW7

$$n = 301$$

$$m = 140$$

	qpintpoint_full	qpintpoint	qpintpointpc_full	qpintpointpc	quadprog
Iteraciones	25	21	14	14	11
Tiempo (s)	0.69438	0.15178	0.71385	0.16869	0.039308
Valor de la función	-88.36	-88.36	-88.36	-88.36	-88.36
Sistema completo	-	0	-	0	-
Convergencia	✅	✅	✅	✅	✅

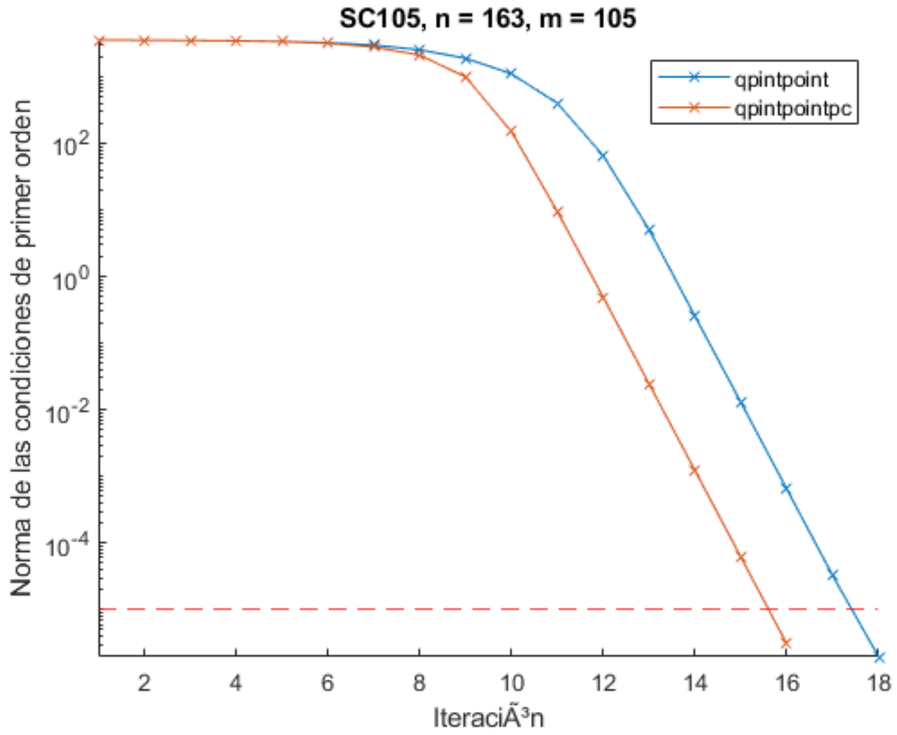


SC105

$$n = 163$$
$$m = 105$$

Matriz mal condicionada

	qpintpoint_full	qpintpoint	qpintpointpc_full	qpintpointpc	quadprog
Iteraciones	27	17	15	15	8
Tiempo (s)	0.16364	0.045007	0.15601	0.074281	0.0088308
Valor de la función	1.772E+05	1.772E+05	1.772E+05	1.772E+05	1.772E+05
Sistema completo	-	3	-	3	-
Convergencia	✅	✅	✅	✅	✅



GROW7

$$n = 660$$

$$m = 300$$

	qpintpoint_full	qpintpoint	qpintpointpc_full	qpintpointpc	quadprog
Iteraciones	56	87	37	37	17
Tiempo (s)	8.7194	5.8812	11.029	3.5177	0.20946
Valor de la función	14453	14453	14453	14453	14453
Sistema completo	-	12	-	4	-
Convergencia	✅	✅	✅	✅	✅