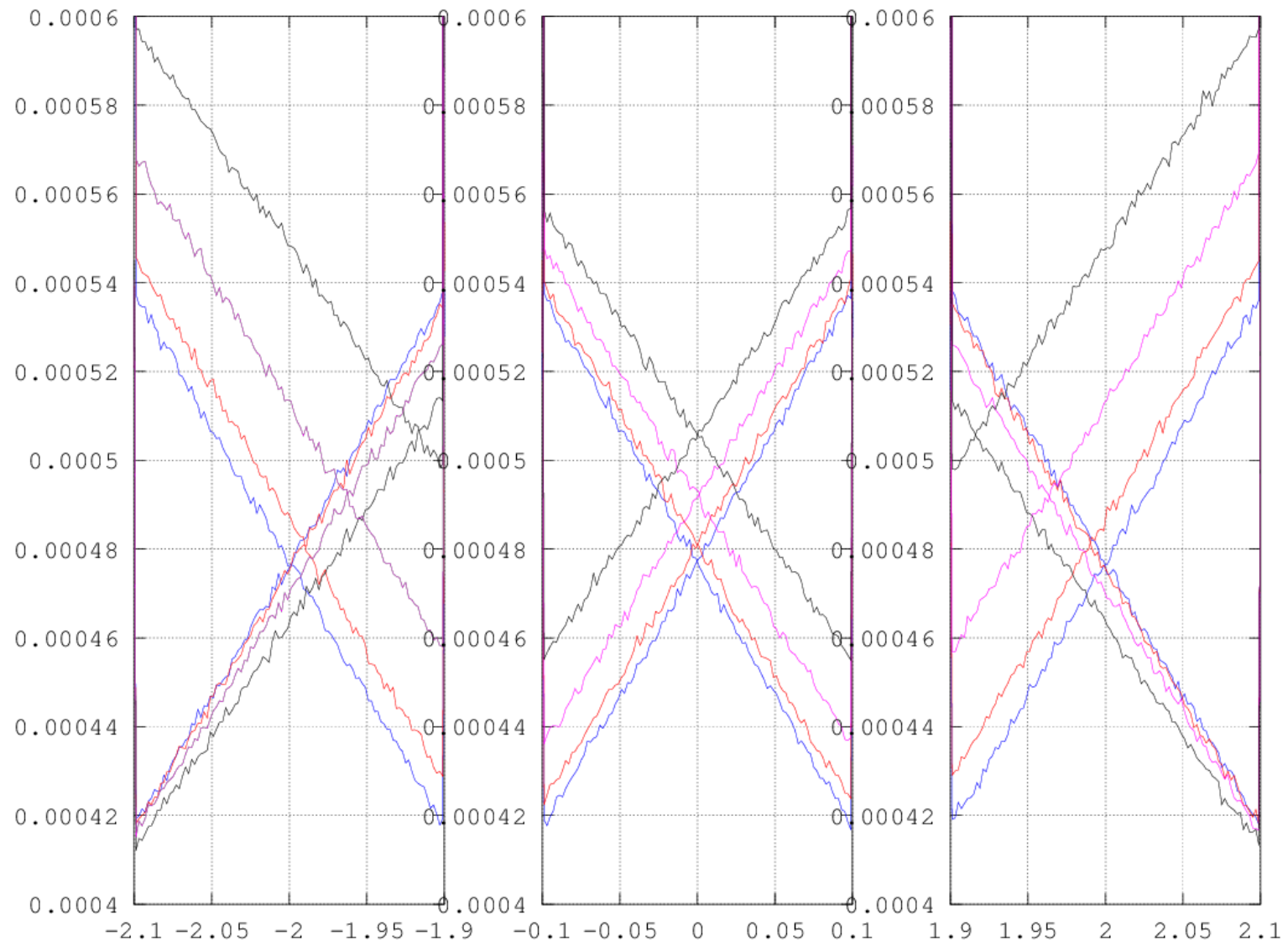
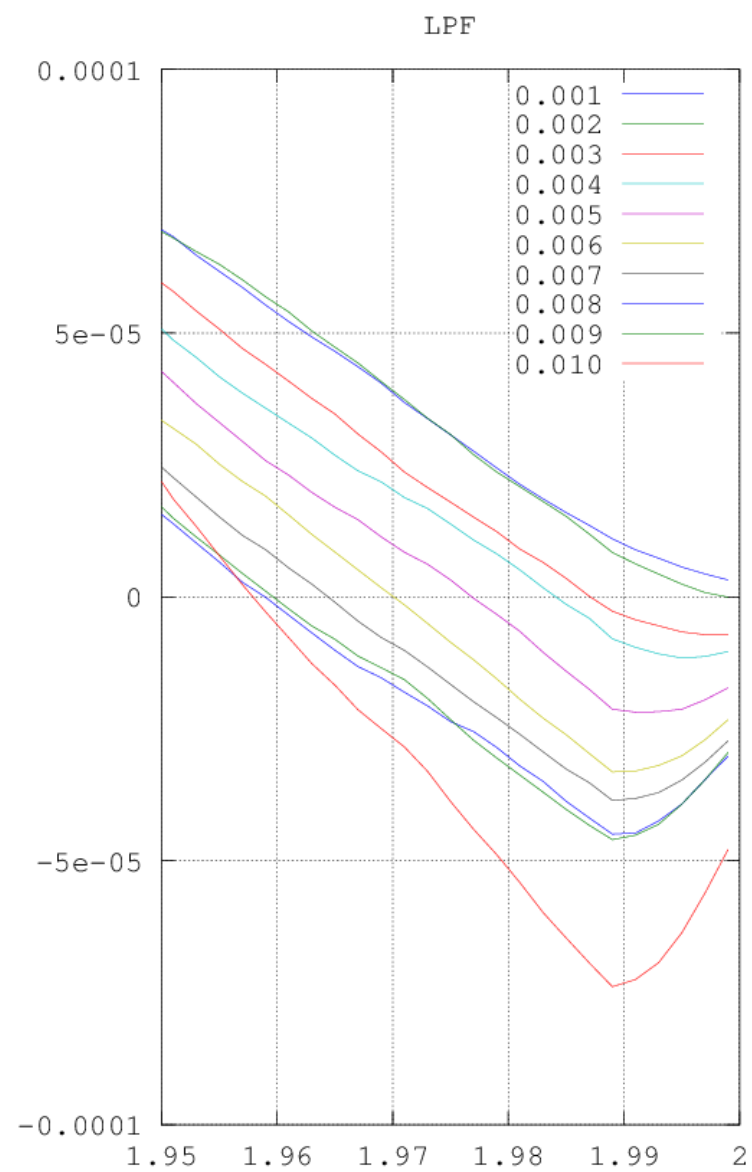
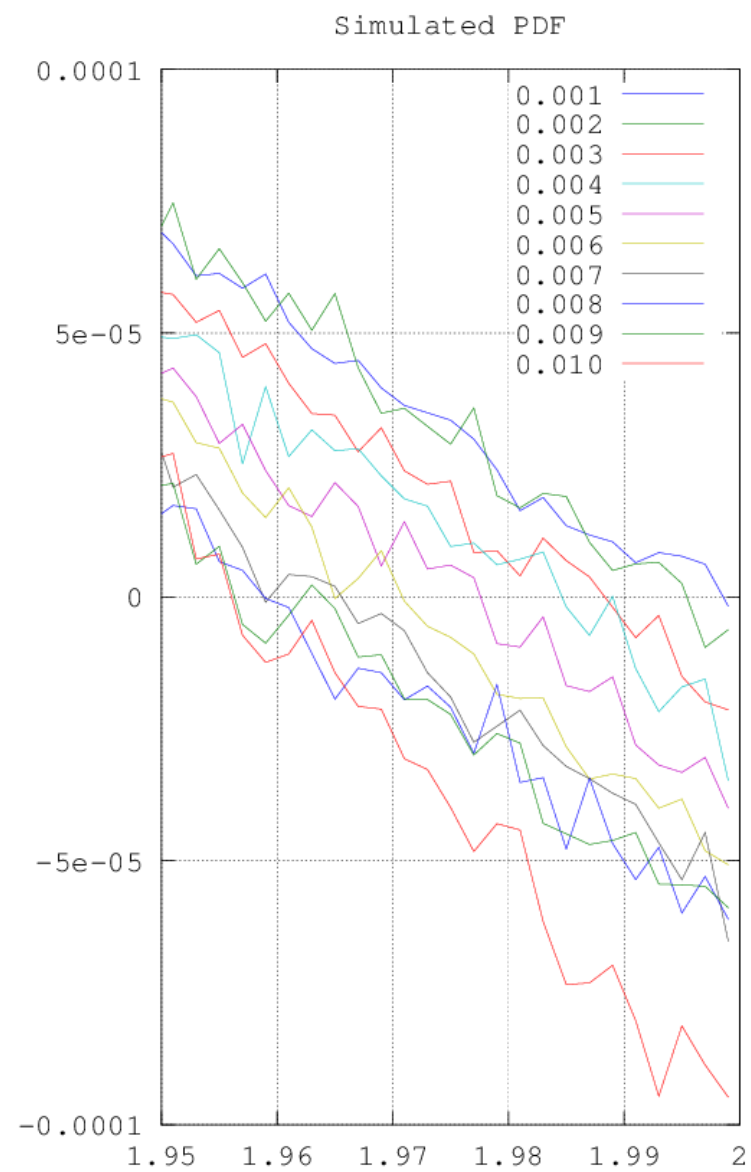
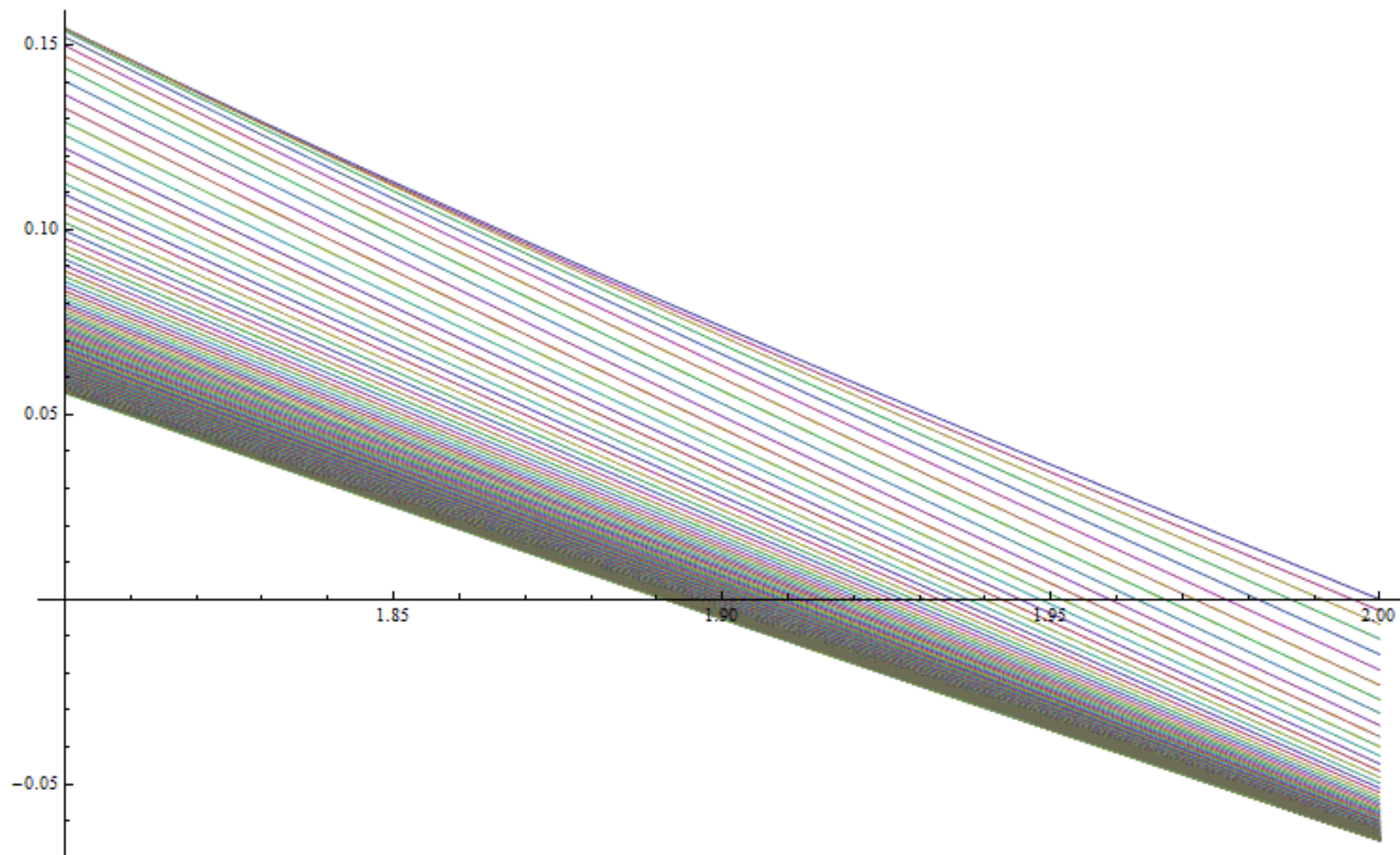


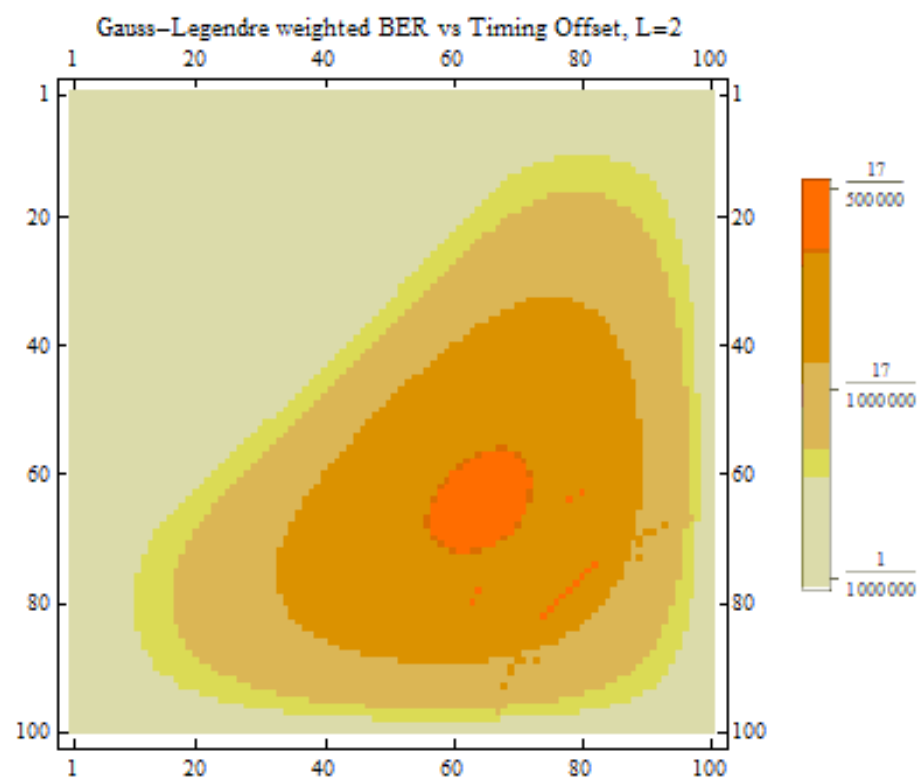
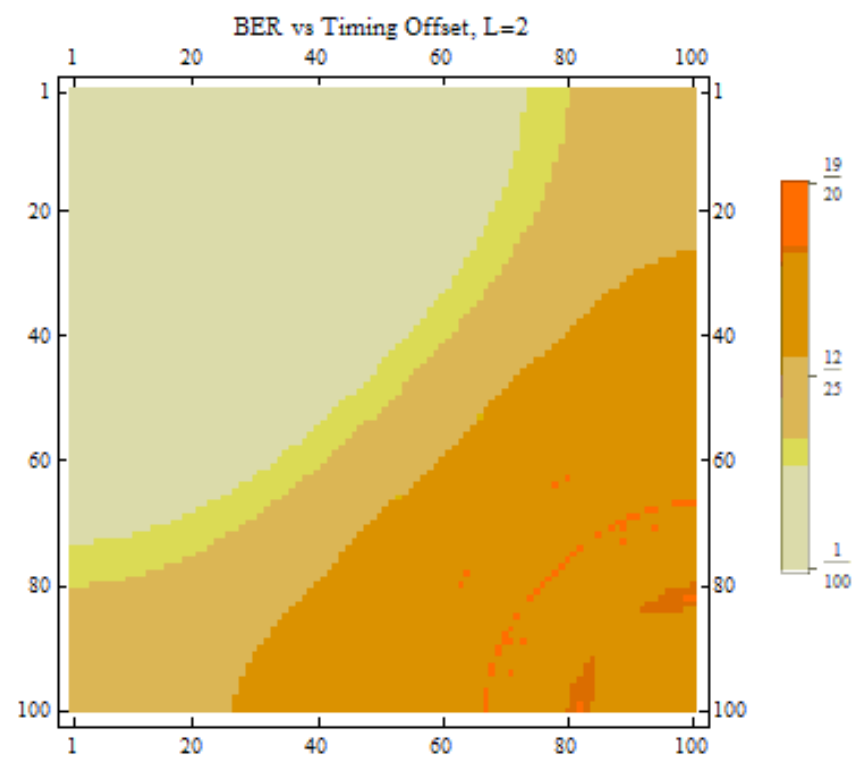
Gram Charlier PDF vs fised timing offset

Received signal PDF with increasing timing error,  $\omega_0 = \{-3, -1, 1, 3\}$

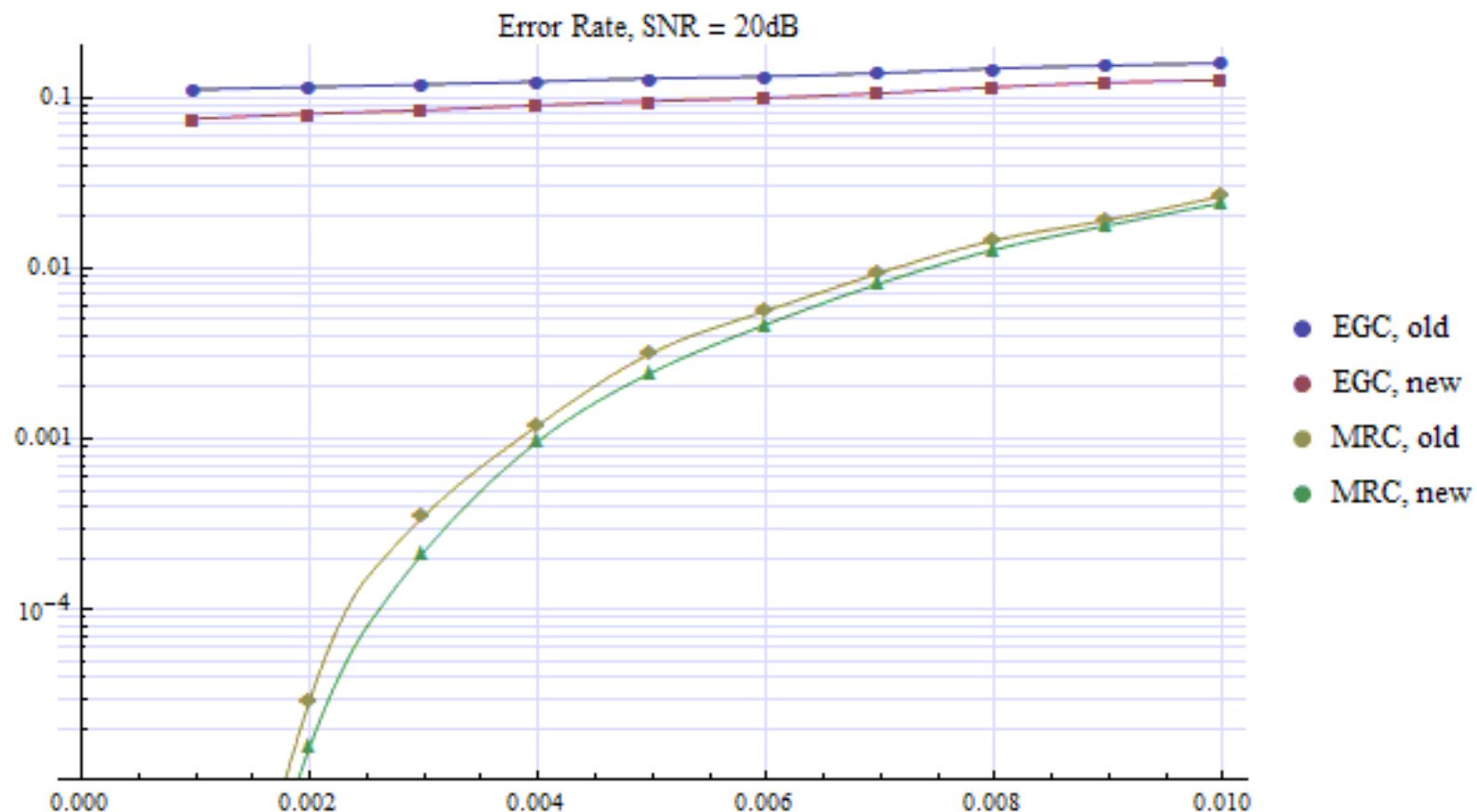








Tikh var	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009	0.01
Prev ER	0.111	0.115	0.119	0.124	0.129	0.133	0.139	0.148	0.154	0.159
New ER	0.0751	0.0801	0.0844	0.0900	0.0951	0.0994	0.106	0.115	0.122	0.126
% drop	33.	30.	29.	27.	26.	25.	24.	22.	21.	20.
MRC ER	$6.00 \times 10^{-8}$	0.0000298	0.000354	0.00121	0.00320	0.00565	0.00943	0.0146	0.0193	0.0265
MRC ER	$8.00 \times 10^{-8}$	0.0000159	0.000218	0.000970	0.00246	0.00470	0.00818	0.0129	0.0179	0.0242
% drop	-33.	47.	38.	20.	23.	17.	13.	12.	7.	9.



Tikh var	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009	0.01
Prev ER	0.111	0.115	0.119	0.123	0.129	0.134	0.140	0.148	0.153	0.159
New ER	0.0751	0.0797	0.0847	0.0883	0.0954	0.100	0.108	0.116	0.119	0.126
% drop	33.	31.	29.	28.	26.	25.	23.	21.	22.	20.
MRC ER	$4.00 \times 10^{-8}$	0.0000185	0.000286	0.000937	0.00287	0.00534	0.0101	0.0131	0.0188	0.0282
MRC ER	$8.00 \times 10^{-8}$	0.0000109	0.000168	0.000776	0.00219	0.00446	0.00886	0.0121	0.0172	0.0245
% drop	-100.	41.	41.	17.	23.	16.	12.	8.	8.	13.

