

DATE: 10/29/01

DO NOT MEASURE FROM THESE GLOBAL COORDINATES

Element centre Element centre Element centre

Global Coord. [m] Global Coord. [m] Global Coord. [m] **Diagnostic**

SNS lattice file for pseudo periods in the SCL High Beta

	Element	length [m]	S [m]	beta_x	beta_y	z	x	y	
SCL_Vac:GV12a	Drft	0.616168	0.000000	6.166214	14.783338	19709.096279	1000000.000000	200004.600000	High beta SCL start
SCL_RF:Cav12a	Drft	0.075500	0.075500	6.093517	14.362289	19709.171779	1000000.000000	200004.600000	
SCL_RF:Cav12b	Drft	0.075500	1.458202	6.100933	9.444603	19710.554481	1000000.000000	200004.600000	SCL_Diag:BLM12a
SCL_RF:Cav12c	Drft	0.075500	2.840905	8.105895	7.271652	19711.937183	1000000.000000	200004.600000	
SCL_RF:Cav12d	Drft	0.075500	4.223607	12.873210	7.236859	19713.319886	1000000.000000	200004.600000	
SCL_Vac:GV12b	Drft	0.291743	5.822553	22.908241	9.432539	19714.918831	1000000.000000	200004.600000	
SCL_Mag:QH12	Quad	0.200000	6.022553	22.851025	10.486323	19715.118831	1000000.000000	200004.600000	
SCL_Diag:BPM12	Drft	0.250000	6.722553	10.712051	24.146067	19715.818831	1000000.000000	200004.600000	SCL_Diag:WS12
SCL_Mag:QV12	Quad	0.200000	6.922553	8.477121	27.691401	19716.018831	1000000.000000	200004.600000	SCL_Diag:BLM12b
SCL_Vac:GV13a	Drft	0.075500	0.000000	6.397335	20.536599	19717.062777	1000000.000000	200004.600000	
SCL_RF:Cav13a	RFgap	0.000000	0.000000	6.398098	20.539052	19717.062777	1000000.000000	200004.600000	
SCL_RF:Cav13b	Drft	0.075500	1.382702	6.237675	13.633392	19718.445479	1000000.000000	200004.600000	SCL_Diag:BLM13a
SCL_RF:Cav13c	Drft	0.075500	2.765405	7.996092	10.091604	19719.828182	1000000.000000	200004.600000	
SCL_RF:Cav13d	Drft	0.075500	4.148107	12.192680	8.890316	19721.210884	1000000.000000	200004.600000	
SCL_Vac:GV13b	Drft	0.291743	5.747053	21.234993	9.719844	19722.809830	1000000.000000	200004.600000	
SCL_Mag:QH13	Quad	0.200000	5.947053	21.175376	10.575489	19723.009830	1000000.000000	200004.600000	
SCL_Diag:BPM13	Drft	0.250000	6.647053	10.041935	22.973833	19723.709830	1000000.000000	200004.600000	SCL_Diag:WS13
SCL_Mag:QV13	Quad	0.200000	6.847053	7.981062	26.096065	19723.909830	1000000.000000	200004.600000	SCL_Diag:BLM13b
SCL_Vac:GV14a	Drft	0.476702	0.000000	6.136076	19.206304	19724.878275	1000000.000000	200004.600000	
SCL_RF:Cav14a	Drft	0.075500	0.075500	6.059144	18.620977	19724.953775	1000000.000000	200004.600000	
SCL_RF:Cav14b	Drft	0.075500	1.458202	5.827169	11.207104	19726.336478	1000000.000000	200004.600000	SCL_Diag:BLM14a
SCL_RF:Cav14c	Drft	0.075500	2.840905	7.307667	7.129153	19727.719180	1000000.000000	200004.600000	
SCL_RF:Cav14d	Drft	0.075500	4.223607	10.964312	5.357534	19729.101882	1000000.000000	200004.600000	
SCL_Vac:GV14b	Drft	0.291743	5.822553	18.995616	5.446019	19730.700828	1000000.000000	200004.600000	
SCL_Mag:QH14	Quad	0.200000	6.022553	18.996350	5.933709	19730.900828	1000000.000000	200004.600000	
SCL_Diag:BPM14	Drft	0.250000	6.722553	9.390184	12.903842	19731.600828	1000000.000000	200004.600000	SCL_Diag:WS14
SCL_Mag:QV14	Quad	0.200000	6.922553	7.610677	14.710361	19731.800828	1000000.000000	200004.600000	SCL_Diag:BLM14b
SCL_Vac:GV15a	Drft	0.476702	0.000000	6.460838	11.491637	19732.769274	1000000.000000	200004.600000	
SCL_RF:Cav15a	Drft	0.075500	0.075500	6.434304	11.216268	19732.844774	1000000.000000	200004.600000	
SCL_RF:Cav15b	Drft	0.075500	1.458202	7.142099	8.042101	19734.227476	1000000.000000	200004.600000	SCL_Diag:BLM15a
SCL_RF:Cav15c	Drft	0.075500	2.840905	9.843624	6.978023	19735.610178	1000000.000000	200004.600000	
SCL_RF:Cav15d	Drft	0.075500	4.223607	15.250588	7.690827	19736.992881	1000000.000000	200004.600000	

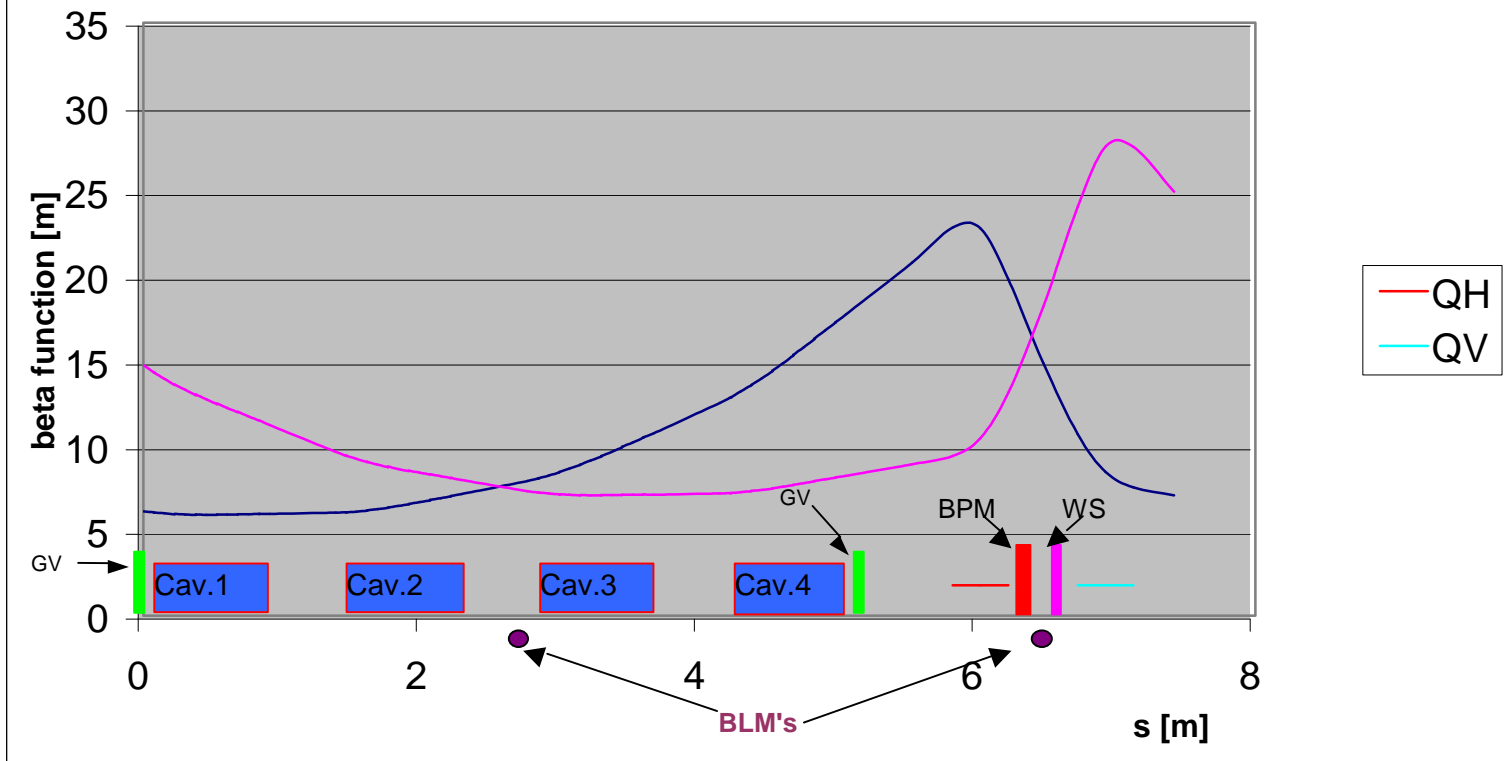
SCL_Vac:GV15b	Drft	0.291743	5.822553	26.203163	10.772845	19738.591826	1000000.000000	200004.600000	
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SCL_Diag:BPM15	Drft	0.250000	6.722553	13.327477	26.681638	19739.491826	1000000.000000	200004.600000	SCL_Diag:WS15
SCL_Mag:QV15	Quad	0.200000	6.922553	10.904919	30.525000	19739.691826	1000000.000000	200004.600000	SCL_Diag:BLM15b
SCL_Vac:GV16a	Drft	0.476702	0.000000	9.253075	24.801556	19740.660272	1000000.000000	200004.600000	
SCL_RF:Cav16a	Drft	0.075500	0.075500	9.198068	24.271510	19740.735772	1000000.000000	200004.600000	
SCL_RF:Cav16b	Drft	0.075500	1.458202	9.387613	17.474711	19742.118474	1000000.000000	200004.600000	SCL_Diag:BLM16a
SCL_RF:Cav16c	Drft	0.075500	2.840905	11.328136	13.667788	19743.501177	1000000.000000	200004.600000	
SCL_RF:Cav16d	Drft	0.075500	4.223607	15.438125	12.055209	19744.883879	1000000.000000	200004.600000	
SCL_Vac:GV16b	Drft	0.291743	5.822553	23.734291	12.301231	19746.482825	1000000.000000	200004.600000	
SCL_Mag:QH16	Quad	0.200000	6.022553	23.555926	13.167101	19746.682825	1000000.000000	200004.600000	
SCL_Diag:BPM16	Drft	0.250000	6.722553	11.933865	26.186850	19747.382825	1000000.000000	200004.600000	SCL_Diag:WS16
SCL_Mag:QV16	Quad	0.200000	6.922553	9.733286	29.422269	19747.582825	1000000.000000	200004.600000	SCL_Diag:BLM16b
SCL_Vac:GV17a	Drft	0.476702	0.000000	7.800404	22.702110	19748.551270	1000000.000000	200004.600000	
SCL_RF:Cav17a	Drft	0.075500	0.075500	7.717457	22.117218	19748.626770	1000000.000000	200004.600000	
SCL_RF:Cav17b	Drft	0.075500	1.458202	7.222554	14.220627	19750.009473	1000000.000000	200004.600000	SCL_Diag:BLM17a
SCL_RF:Cav17c	Drft	0.075500	2.840905	8.227730	9.476067	19751.392175	1000000.000000	200004.600000	
SCL_RF:Cav17d	Drft	0.075500	4.223607	10.972912	6.971695	19752.774878	1000000.000000	200004.600000	
SCL_Vac:GV17b	Drft	0.291743	5.822553	16.937426	6.105424	19754.373823	1000000.000000	200004.600000	
SCL_Mag:QH17	Quad	0.200000	6.022553	16.897018	6.454744	19754.573823	1000000.000000	200004.600000	
SCL_Diag:BPM17	Drft	0.250000	6.722553	9.131277	12.335645	19755.273823	1000000.000000	200004.600000	SCL_Diag:WS17
SCL_Mag:QV17	Quad	0.200000	6.922553	7.665138	13.814925	19755.473823	1000000.000000	200004.600000	SCL_Diag:BLM17b
SCL_Vac:GV18a	Drft	0.476702	0.000000	7.064389	11.072823	19756.442269	1000000.000000	200004.600000	
SCL_RF:Cav18a	Drft	0.075500	0.075500	7.072735	10.837925	19756.517769	1000000.000000	200004.600000	
SCL_RF:Cav18b	Drft	0.075500	1.458202	8.185130	7.911650	19757.900471	1000000.000000	200004.600000	SCL_Diag:BLM18a
SCL_RF:Cav18c	Drft	0.075500	2.840905	10.981926	6.700152	19759.283174	1000000.000000	200004.600000	
SCL_RF:Cav18d	Drft	0.075500	4.223607	15.937353	6.911205	19760.665876	1000000.000000	200004.600000	
SCL_Vac:GV18b	Drft	0.291743	5.822553	25.180917	8.854067	19762.264822	1000000.000000	200004.600000	
SCL_Mag:QH18	Quad	0.200000	6.022553	25.188905	9.701538	19762.464822	1000000.000000	200004.600000	
SCL_Diag:BPM18	Drft	0.250000	6.722553	14.184025	19.672791	19763.164822	1000000.000000	200004.600000	SCL_Diag:WS18
SCL_Mag:QV18	Quad	0.200000	6.922553	12.068997	22.281716	19763.364822	1000000.000000	200004.600000	SCL_Diag:BLM18b
SCL_Vac:GV19a	Drft	0.476702	0.000000	11.277766	19.428790	19764.333267	1000000.000000	200004.600000	
SCL_RF:Cav19a	Drft	0.075500	0.075500	11.282742	19.144706	19764.408767	1000000.000000	200004.600000	
SCL_RF:Cav19b	Drft	0.075500	1.458202	12.329647	15.450439	19765.791470	1000000.000000	200004.600000	SCL_Diag:BLM19a
SCL_RF:Cav19c	Drft	0.075500	2.840905	14.886322	13.514627	19767.174172	1000000.000000	200004.600000	
SCL_RF:Cav19d	Drft	0.075500	4.223607	19.308074	13.048685	19768.556874	1000000.000000	200004.600000	
SCL_Vac:GV19b	Drft	0.291743	5.822553	27.366031	14.155630	19770.155820	1000000.000000	200004.600000	

SCL_Mag:QH19	Quad	0.200000	6.022553	27.139311	15.120490	19770.355820	1000000.000000	200004.600000	
SCL_Diag:BPM19	Drft	0.250000	6.722553	15.168417	28.184031	19771.055820	1000000.000000	200004.600000	SCL_Diag:WS19
SCL_Mag:QV19	Quad	0.200000	6.922553	12.841216	31.467747	19771.255820	1000000.000000	200004.600000	SCL_Diag:BLM19b
SCL_Vac:GV20a	Drft	0.476702	0.000000	11.214606	26.519773	19772.224266	1000000.000000	200004.600000	
SCL_RF:Cav20a	Drft	0.075500	0.075500	11.156671	26.056200	19772.299766	1000000.000000	200004.600000	
SCL_RF:Cav20b	Drft	0.075500	1.458202	10.989205	19.561104	19773.682468	1000000.000000	200004.600000	SCL_Diag:BLM20a
SCL_RF:Cav20c	Drft	0.075500	2.840905	12.179300	15.446652	19775.065170	1000000.000000	200004.600000	
SCL_RF:Cav20d	Drft	0.075500	4.223607	14.923891	13.178044	19776.447873	1000000.000000	200004.600000	
SCL_Vac:GV20b	Drft	0.291743	5.822553	20.448820	12.359842	19778.046818	1000000.000000	200004.600000	
SCL_Mag:QH20	Quad	0.200000	6.022553	20.287442	12.956336	19778.246818	1000000.000000	200004.600000	
SCL_Diag:BPM20	Drft	0.250000	6.722553	11.751582	22.639263	19778.946818	1000000.000000	200004.600000	SCL_Diag:WS20
SCL_Mag:QV20	Quad	0.200000	6.922553	10.093886	25.017799	19779.146818	1000000.000000	200004.600000	SCL_Diag:BLM20b
SCL_Vac:GV21a	Drft	0.476702	0.000000	9.295308	20.838672	19780.115264	1000000.000000	200004.600000	
SCL_RF:Cav21a	Drft	0.075500	0.075500	9.289430	20.461873	19780.190764	1000000.000000	200004.600000	
SCL_RF:Cav21b	Drft	0.075500	1.458202	9.979205	15.160534	19781.573466	1000000.000000	200004.600000	SCL_Diag:BLM21a
SCL_RF:Cav21c	Drft	0.075500	2.840905	12.004256	11.847395	19782.956169	1000000.000000	200004.600000	
SCL_RF:Cav21d	Drft	0.075500	4.223607	15.610505	10.059472	19784.338871	1000000.000000	200004.600000	
SCL_Vac:GV21b	Drft	0.291743	5.822553	22.192254	9.491391	19785.937817	1000000.000000	200004.600000	
SCL_Mag:QH21	Quad	0.200000	6.022553	22.133573	9.946735	19786.137817	1000000.000000	200004.600000	
SCL_Diag:BPM21	Drft	0.250000	6.722553	13.472461	17.092471	19786.837817	1000000.000000	200004.600000	SCL_Diag:WS21
SCL_Mag:QV21	Quad	0.200000	6.922553	11.781034	18.861854	19787.037817	1000000.000000	200004.600000	SCL_Diag:BLM21b
SCL_Vac:GV22a	Drft	0.476702	0.000000	11.482391	16.151066	19788.006262	1000000.000000	200004.600000	
SCL_RF:Cav22a	Drft	0.075500	0.075500	11.517038	15.901145	19788.081762	1000000.000000	200004.600000	
SCL_RF:Cav22b	Drft	0.075500	1.458202	12.917331	12.419989	19789.464465	1000000.000000	200004.600000	SCL_Diag:BLM22a
SCL_RF:Cav22c	Drft	0.075500	2.840905	15.593677	10.350573	19790.847167	1000000.000000	200004.600000	
SCL_RF:Cav22d	Drft	0.075500	4.223607	19.788435	9.437023	19792.229870	1000000.000000	200004.600000	
SCL_Vac:GV22b	Drft	0.291743	5.822553	26.919485	9.622694	19793.828815	1000000.000000	200004.600000	
SCL_Mag:QH22	Quad	0.200000	6.022553	26.751816	10.150834	19794.028815	1000000.000000	200004.600000	
SCL_Diag:BPM22	Drft	0.250000	6.722553	16.403642	17.443698	19794.728815	1000000.000000	200004.600000	SCL_Diag:WS22
SCL_Mag:QV22	Quad	0.200000	6.922553	14.354936	19.274656	19794.928815	1000000.000000	200004.600000	SCL_Diag:BLM22b
SCL_Vac:GV23a	Drft	0.476702	0.000000	13.554099	17.094705	19795.897261	1000000.000000	200004.600000	
SCL_RF:Cav23a	Drft	0.075500	0.075500	13.554074	16.881319	19795.972761	1000000.000000	200004.600000	
SCL_RF:Cav23b	Drft	0.075500	1.458202	14.256908	13.914578	19797.355463	1000000.000000	200004.600000	SCL_Diag:BLM23a
SCL_RF:Cav23c	Drft	0.075500	2.840905	16.050701	12.174222	19798.738166	1000000.000000	200004.600000	
SCL_RF:Cav23d	Drft	0.075500	4.223607	19.086449	11.489379	19800.120868	1000000.000000	200004.600000	
SCL_Vac:GV23b	Drft	0.291743	5.822553	24.403464	11.882577	19801.719814	1000000.000000	200004.600000	
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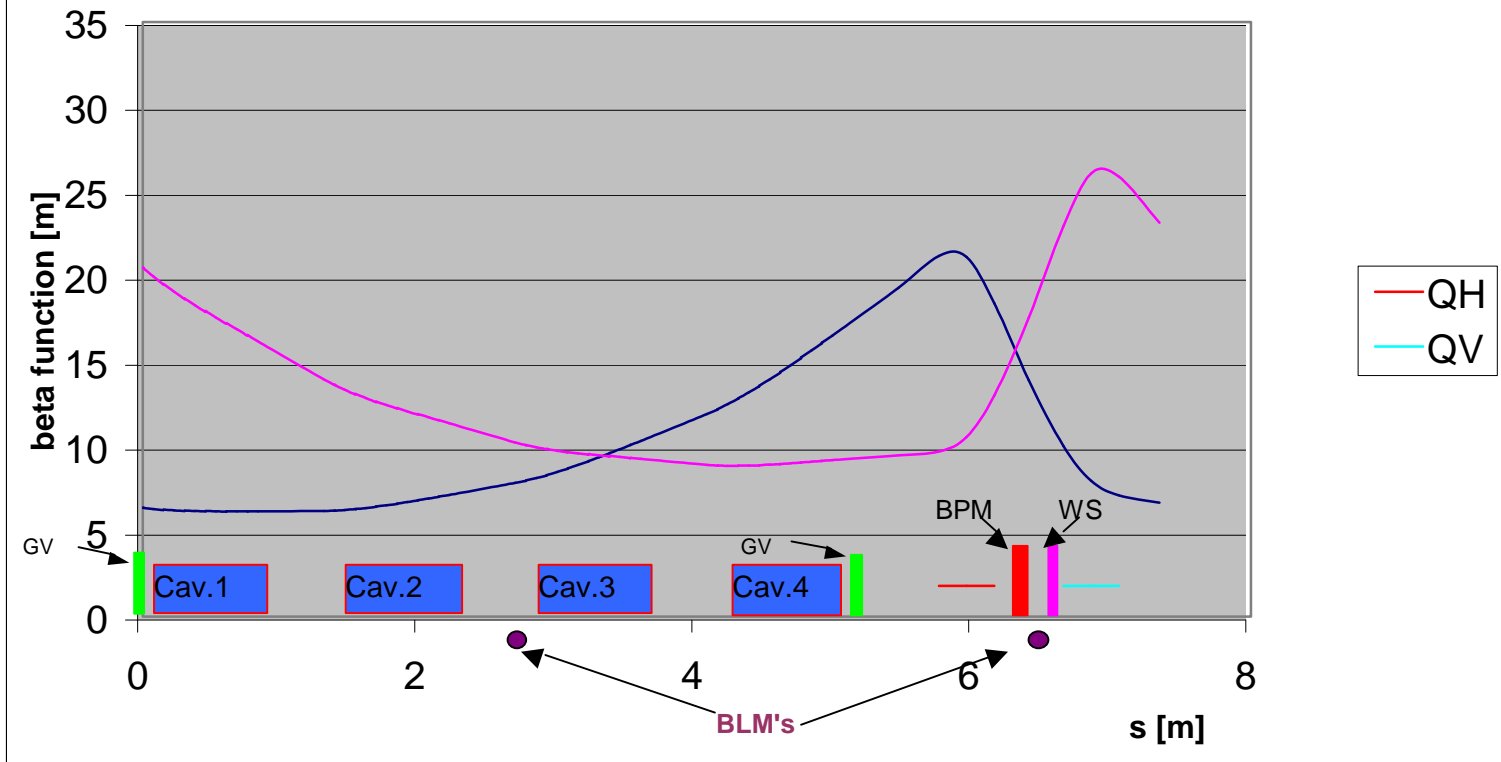
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SCL_Mag:QV23	Quad	0.200000	6.922553	12.918661	23.260896	19802.819814	1000000.000000	200004.600000	SCL_Diag:BLM23b
SCL_Vac:GV24a	Drft	0.476702	0.000000	11.852815	20.807551	19803.788259	1000000.000000	200004.600000	
SCL_RF:Cav24a	Drft	0.075500	0.075500	11.826499	20.563216	19803.863759	1000000.000000	200004.600000	
SCL_RF:Cav24b	Drft	0.075500	1.458202	11.741224	16.706557	19805.246462	1000000.000000	200004.600000	SCL_Diag:BLM24a
SCL_RF:Cav24c	Drft	0.075500	2.840905	12.438036	13.941578	19806.629164	1000000.000000	200004.600000	
SCL_RF:Cav24d	Drft	0.075500	4.223607	13.983267	12.154554	19808.011866	1000000.000000	200004.600000	
SCL_Vac:GV24b	Drft	0.291743	5.822553	16.950711	11.179247	19809.610812	1000000.000000	200004.600000	
SCL_Mag:QH24	Quad	0.200000	6.022553	16.693910	11.615683	19809.810812	1000000.000000	200004.600000	
SCL_Diag:BPM24	Drft	0.250000	6.722553	10.077432	18.926334	19810.510812	1000000.000000	200004.600000	SCL_Diag:WS24
SCL_Mag:QV24	Quad	0.200000	6.922553	8.769224	20.713440	19810.710812	1000000.000000	200004.600000	SCL_Diag:BLM24b
SCL_Vac:GV25a	Drft	0.476702	7.890998	7.962291	17.974462	19811.679258	1000000.000000	200004.600000	
SCL_RF:Cav25a	Drft	0.075500	7.966498	7.945696	17.721031	19811.754758	1000000.000000	200004.600000	
SCL_RF:Cav25b	Drft	0.075500	9.349201	8.109414	13.788939	19813.137460	1000000.000000	200004.600000	SCL_Diag:BLM25a
SCL_RF:Cav25c	Drft	0.075500	10.731903	9.190275	11.075605	19814.520162	1000000.000000	200004.600000	
SCL_RF:Cav25d	Drft	0.075500	12.114606	11.266461	9.410089	19815.902865	1000000.000000	200004.600000	
SCL_Vac:GV25b	Drft	0.291743	13.713551	15.053858	8.612209	19817.501810	1000000.000000	200004.600000	
SCL_Mag:QH25	Quad	0.200000	13.913551	14.992513	8.961790	19817.701810	1000000.000000	200004.600000	
SCL_Diag:BPM25	Drft	0.250000	14.613551	9.513011	14.694225	19818.401810	1000000.000000	200004.600000	SCL_Diag:WS25
SCL_Mag:QV25	Quad	0.200000	14.813551	8.443837	16.109121	19818.601810	1000000.000000	200004.600000	SCL_Diag:BLM25b
SCL_Vac:GV26a	Drft	0.476702	15.781997	8.512958	14.119232	19819.570256	1000000.000000	200004.600000	
SCL_RF:Cav26a	Drft	0.075500	15.857497	8.562560	13.933528	19819.645756	1000000.000000	200004.600000	
SCL_RF:Cav26b	Drft	0.075500	17.240199	9.919656	11.092605	19821.028458	1000000.000000	200004.600000	SCL_Diag:BLM26a
SCL_RF:Cav26c	Drft	0.075500	18.622902	12.176797	9.216664	19822.411161	1000000.000000	200004.600000	
SCL_RF:Cav26d	Drft	0.075500	20.005604	15.418803	8.187454	19823.793863	1000000.000000	200004.600000	
SCL_Vac:GV26b	Drft	0.291743	21.604550	20.515276	7.946826	19825.392809	1000000.000000	200004.600000	
SCL_Mag:QH26	Quad	0.200000	21.804550	20.378420	8.329066	19825.592809	1000000.000000	200004.600000	
SCL_Diag:BPM26	Drft	0.250000	22.504550	12.725194	13.912458	19826.292809	1000000.000000	200004.600000	SCL_Diag:WS26
SCL_Mag:QV26	Quad	0.400000	22.904550	10.712042	15.445712	19826.692809	1000000.000000	200004.600000	SCL_Diag:BLM26b
SCL_Vac:GV27a	Drft	0.150000	29.495550	17.152892	7.913737	19833.283809	1000000.000000	200004.600000	SCL_Vac:GV27b
SCL_Mag:QH27	Quad	0.400000	29.895550	15.188620	9.417441	19833.683809	1000000.000000	200004.600000	SCL_Diag:WS27
SCL_Diag:BPM27	Drft	0.500000	30.395550	10.047277	13.784523	19834.183809	1000000.000000	200004.600000	SCL_Diag:BLM27
SCL_Mag:QV27	Quad	0.400000	30.795550	8.142385	15.273355	19834.583809	1000000.000000	200004.600000	SCL_Diag:BCM27
SCL_Mag:QH28	Quad	0.400000	37.786550	9.382511	8.663028	19841.574809	1000000.000000	200004.600000	SCL_Diag:WS28
SCL_Diag:BPM28	Drft	0.500000	38.286550	6.379940	12.665148	19842.074809	1000000.000000	200004.600000	SCL_Diag:BLM28
SCL_Mag:QV28	Quad	0.400000	38.686550	5.362015	14.026003	19842.474809	1000000.000000	200004.600000	
SCL_Mag:QH29	Quad	0.400000	45.677550	13.852329	8.263000	19849.465809	1000000.000000	200004.600000	

SCL_Diag:BPM29	Drft	0.500000	46.177550	9.668287	12.135883	19849.965809	1000000.000000	200004.600000	SCL_Diag:WS29
SCL_Mag:QV29	Quad	0.400000	46.577550	8.304956	13.475766	19850.365809	1000000.000000	200004.600000	SCL_Diag:BLM29
SCL_Mag:QH30	Quad	0.400000	53.568550	17.068036	7.651970	19857.356809	1000000.000000	200004.600000	
SCL_Diag:BPM30	Drft	0.500000	54.068550	14.366400	9.721704	19857.856809	1000000.000000	200004.600000	SCL_Diag:WS30
SCL_Mag:QV30	Quad	0.400000	54.468550	13.643605	10.629282	19858.256809	1000000.000000	200004.600000	SCL_Diag:BLM30
SCL_Mag:QH31	Quad	0.400000	61.459550	27.579212	17.705448	19865.247809	1000000.000000	200004.600000	
SCL_Diag:BPM31	Drft	0.500000	61.959550	22.337067	23.275049	19865.747809	1000000.000000	200004.600000	SCL_Diag:WS31
SCL_Mag:QV31	Quad	0.400000	62.359550	21.066936	25.203268	19866.147809	1000000.000000	200004.600000	SCL_Diag:BLM31
SCL_Mag:QH32	Quad	0.400000	69.350550	46.371788	14.666150	19873.138809	1000000.000000	200004.600000	
SCL_Diag:BPM32	Drft	0.500000	69.850550	31.808564	20.053380	19873.638809	1000000.000000	200004.600000	SCL_Diag:WS32
SCL_Mag:QV32	Quad	0.400000	70.250550	25.461880	22.173926	19874.038809	1000000.000000	200004.600000	SCL_Diag:BLM32
Pumping	Pumping	3.000000	73.400550	2.272693	16.074422	19877.188809	1000000.000000	200004.600000	Diff Pumping

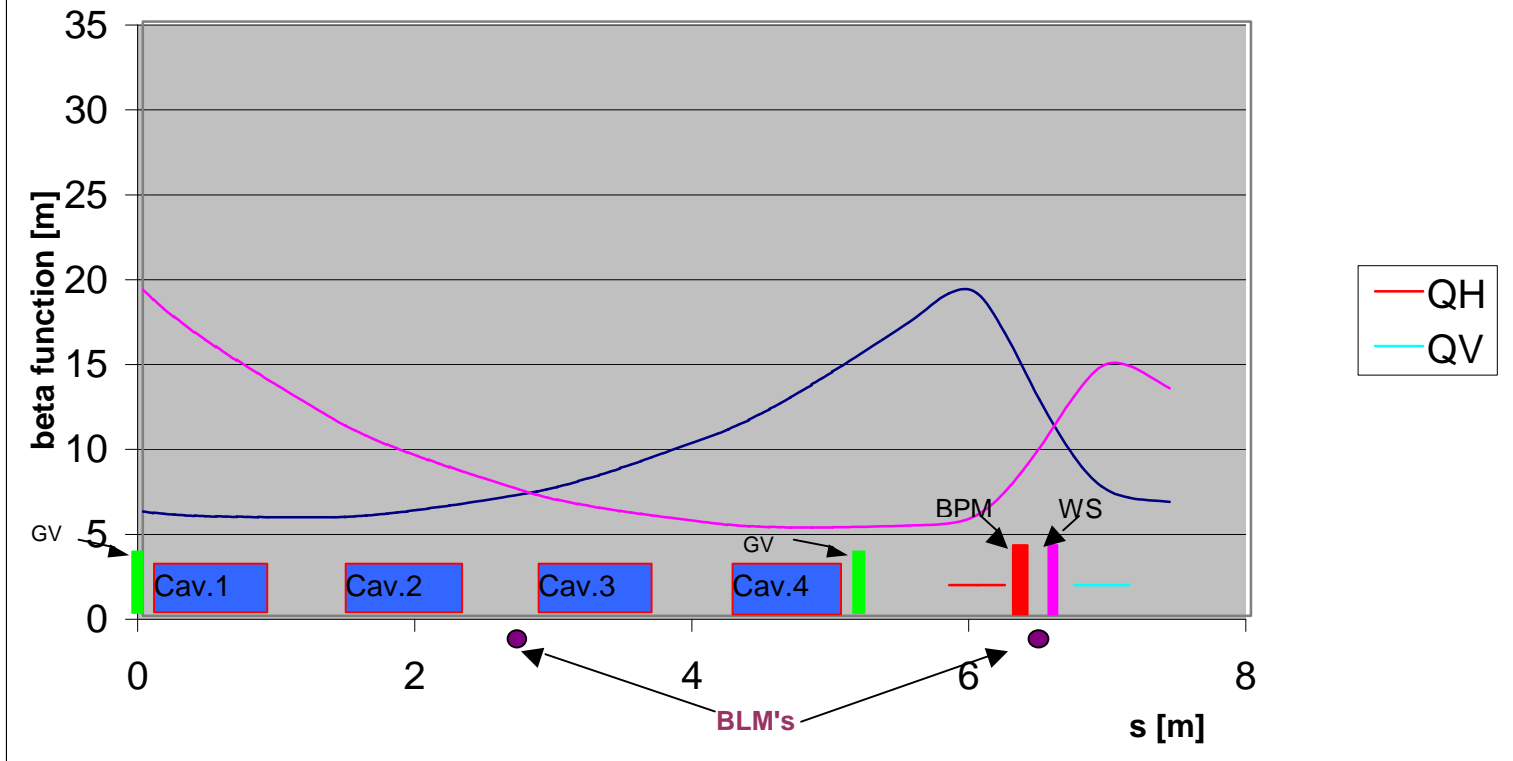
SCL high beta period #12



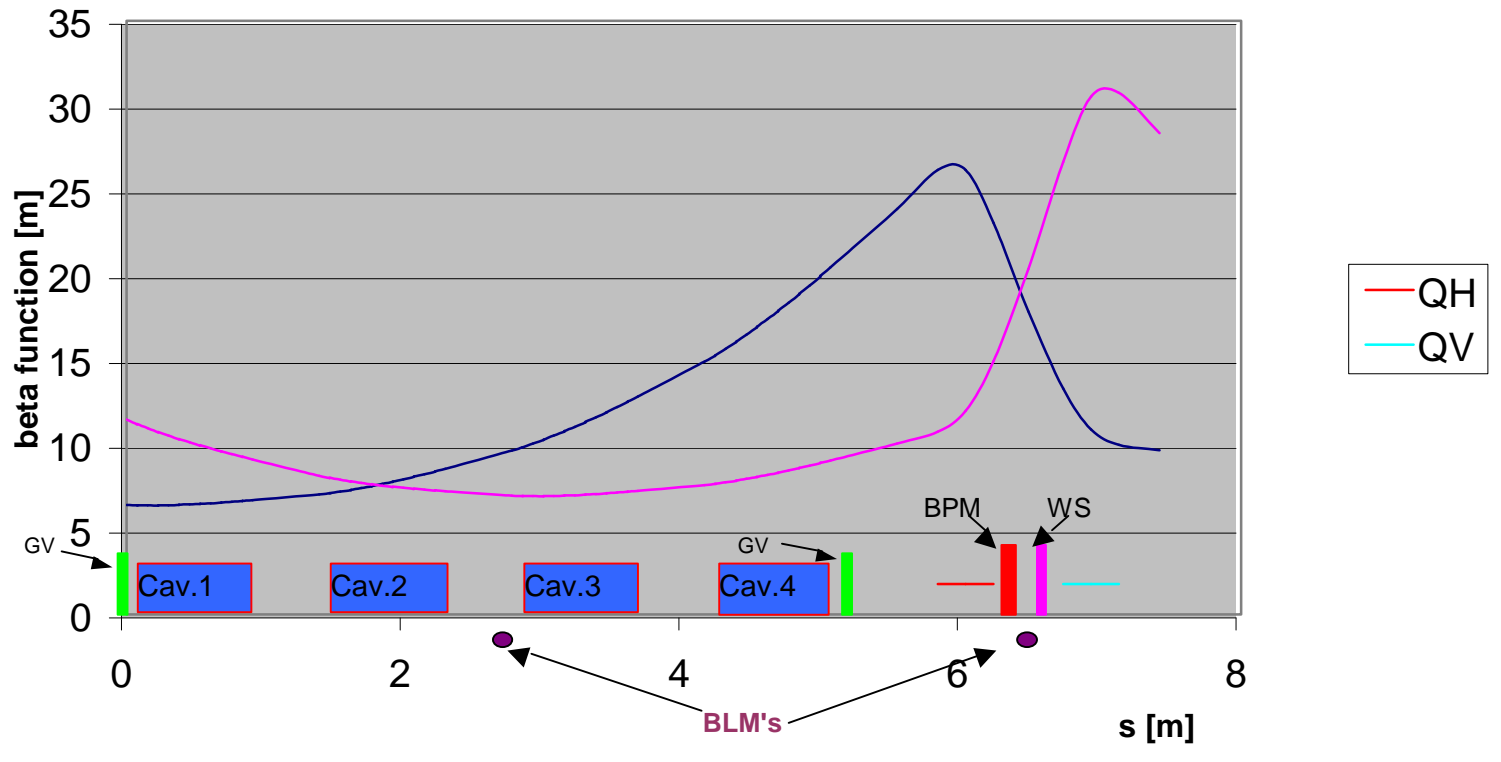
SCL high beta period #13



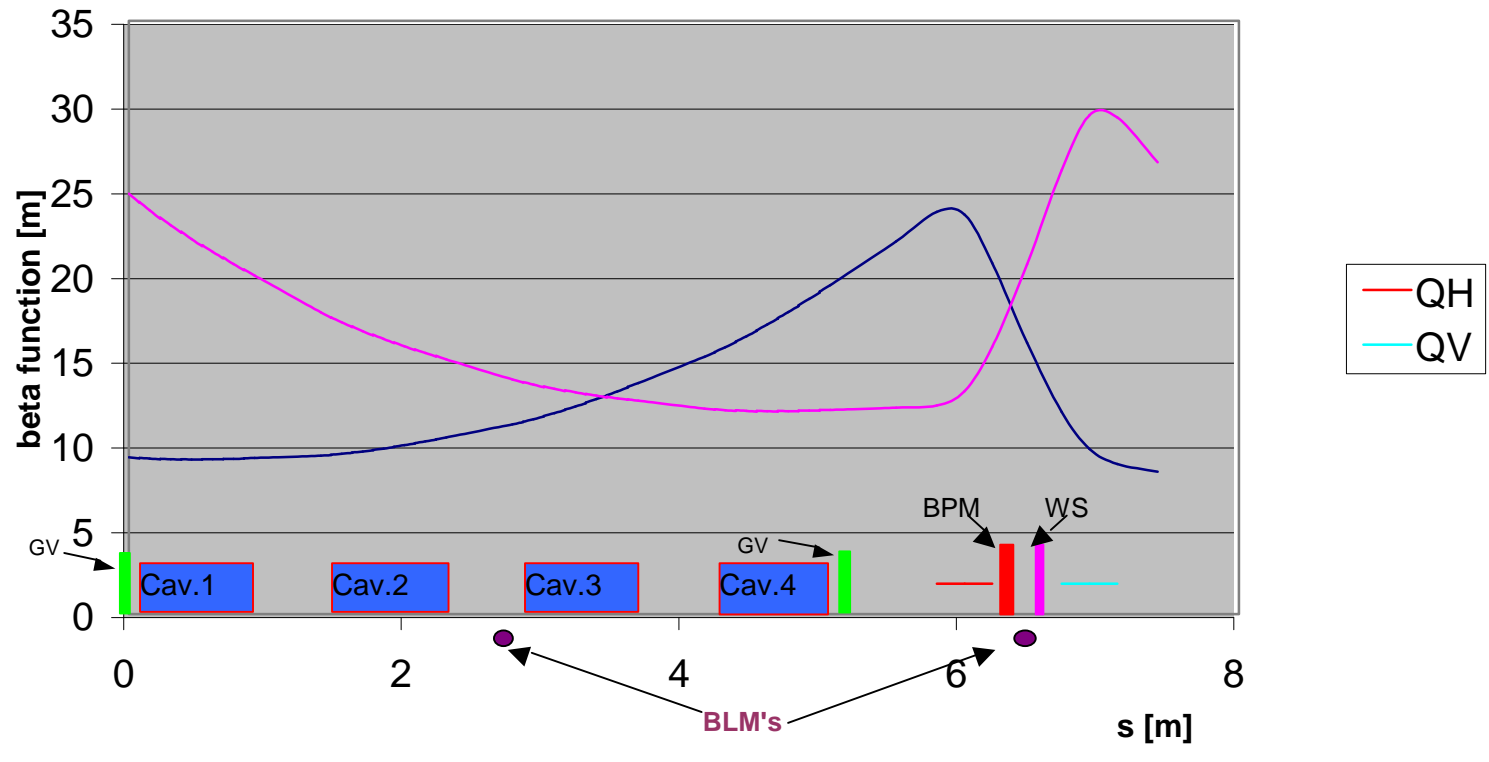
SCL high beta period #14



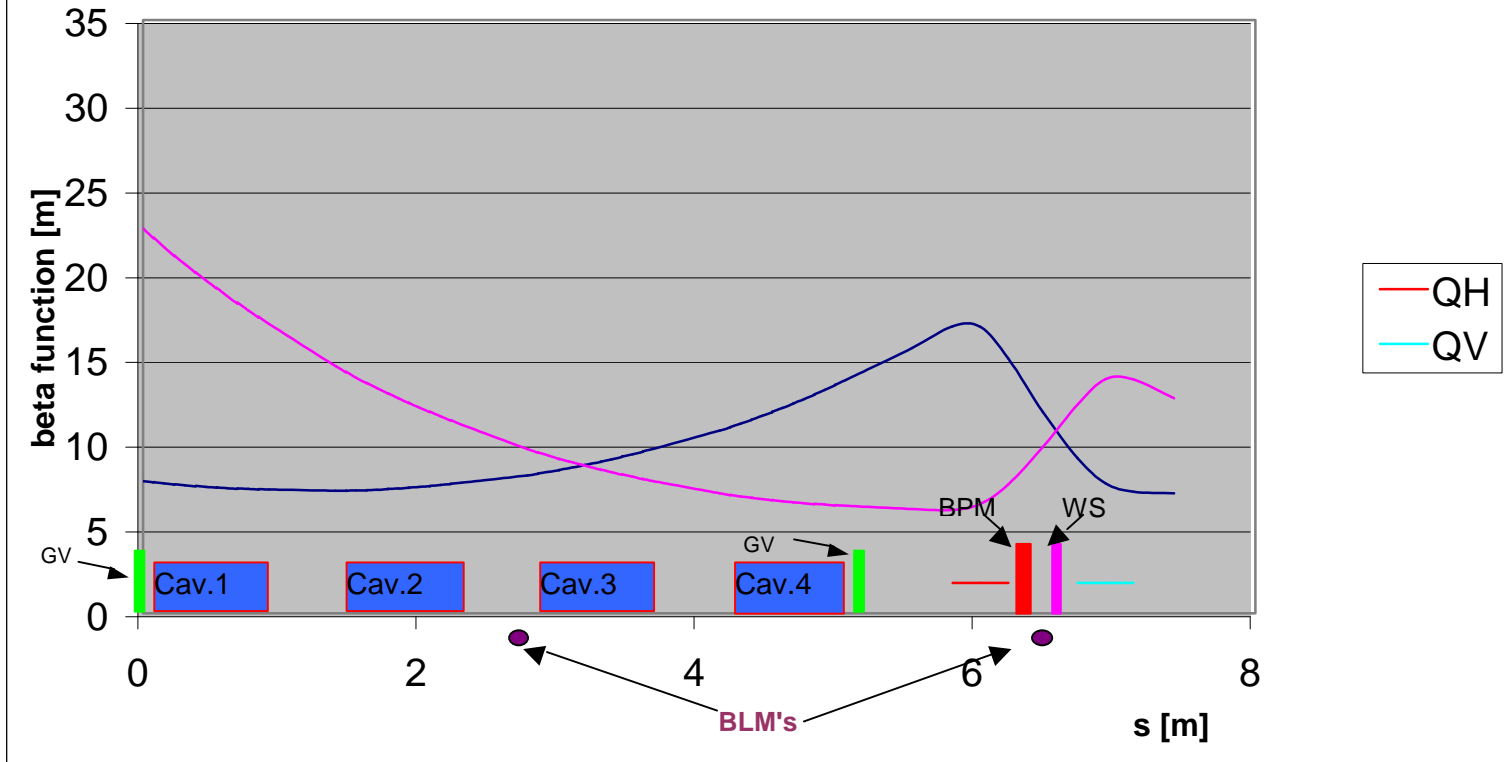
SCL high beta period #15



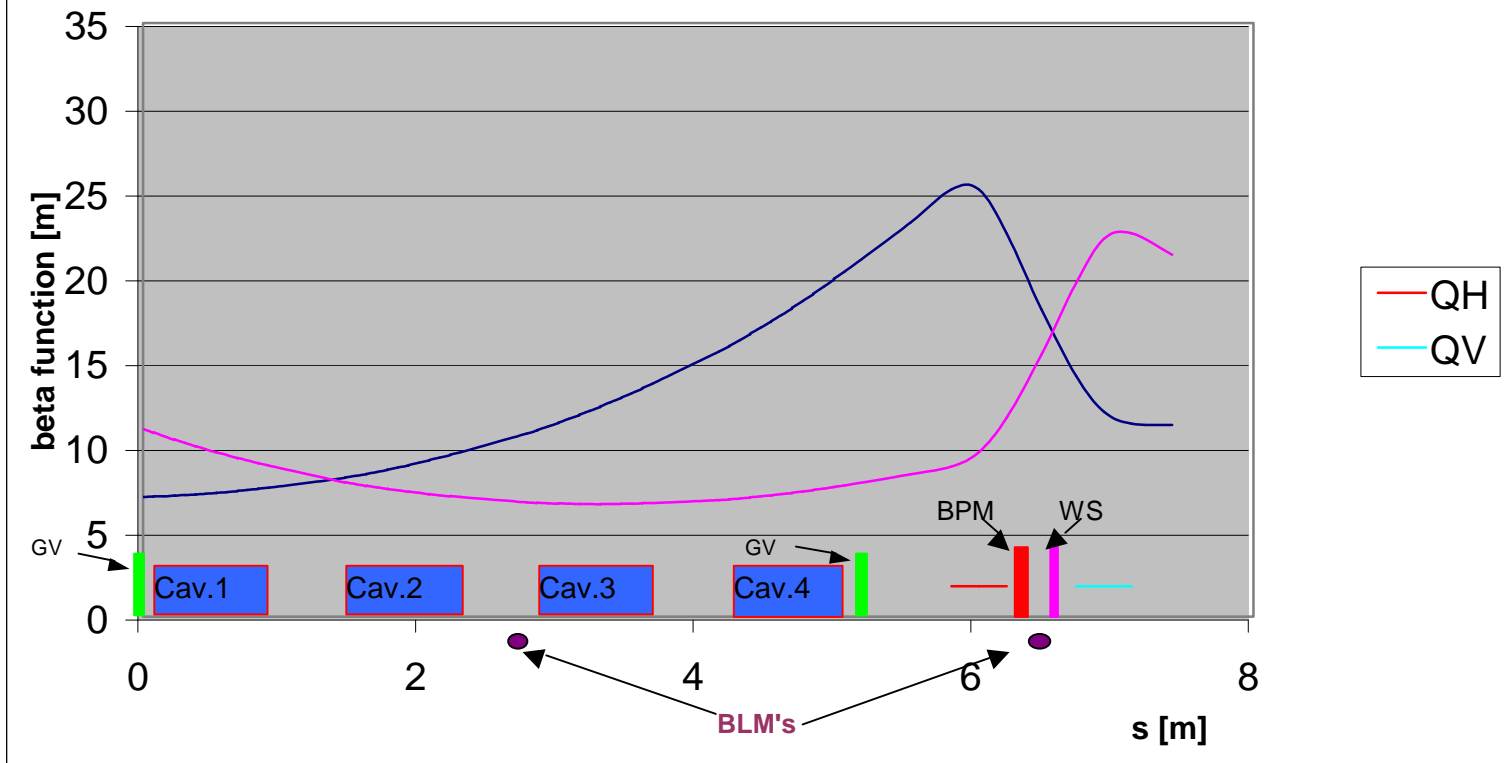
SCL high beta period #16



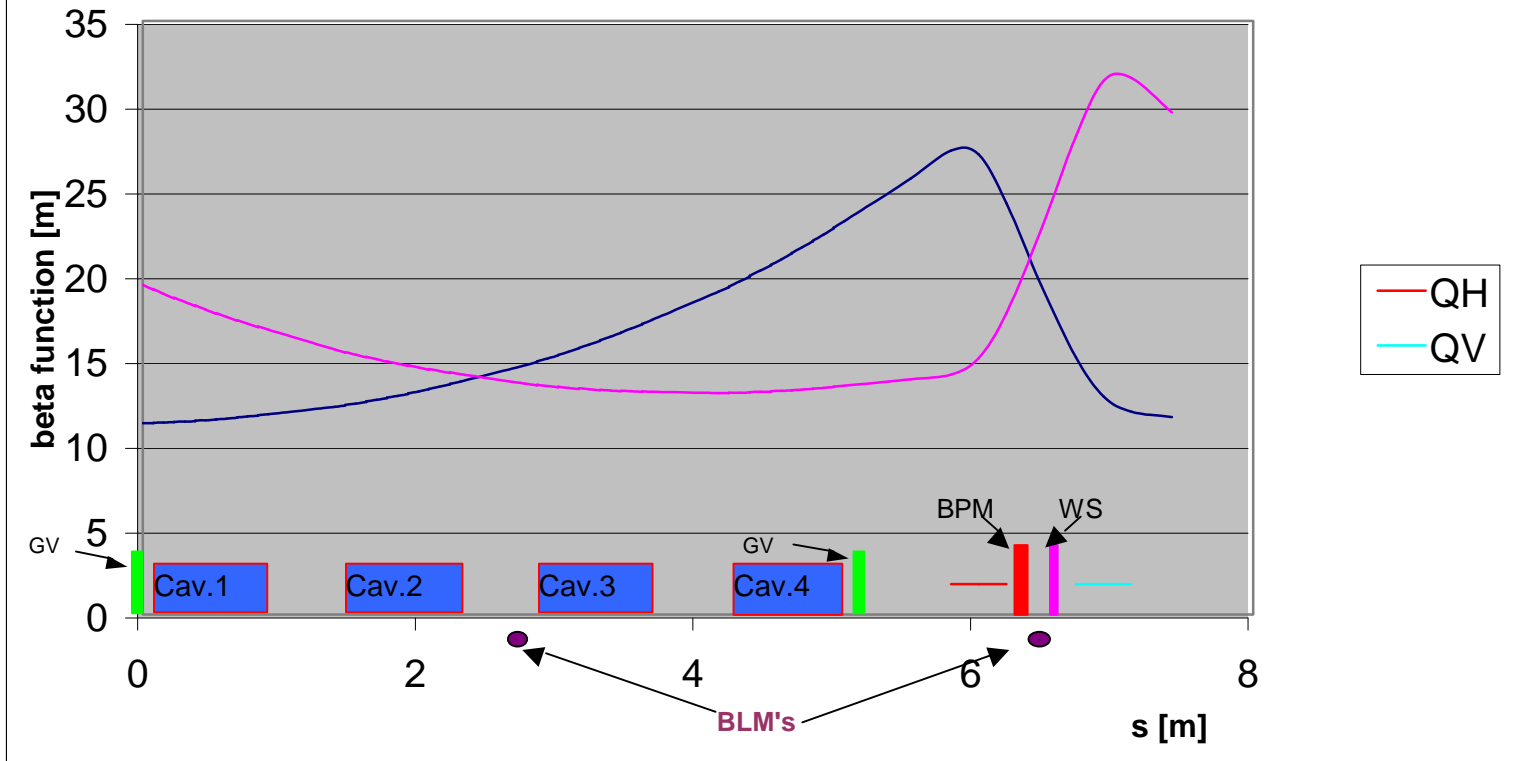
SCL high beta period #17



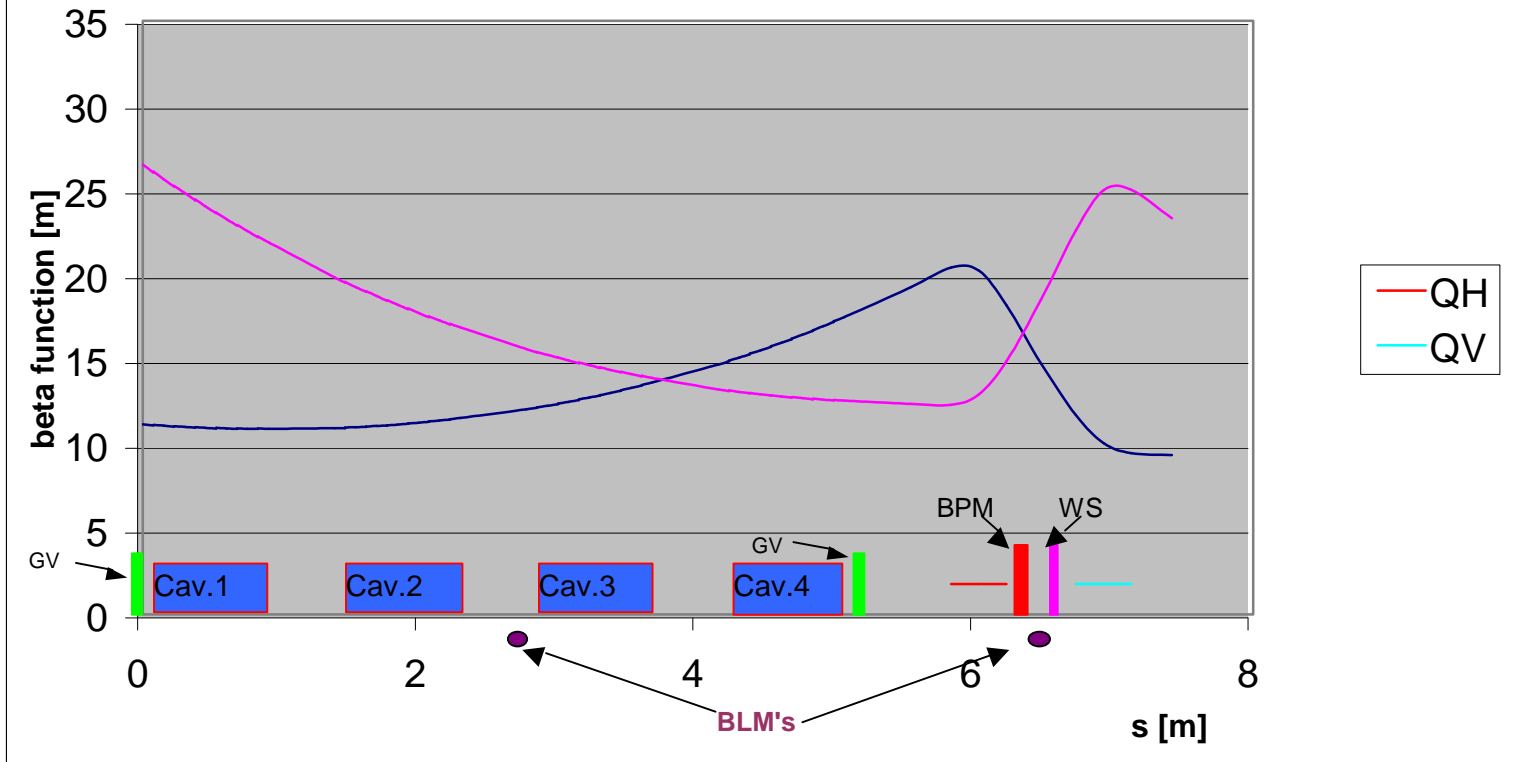
SCL high beta period #18



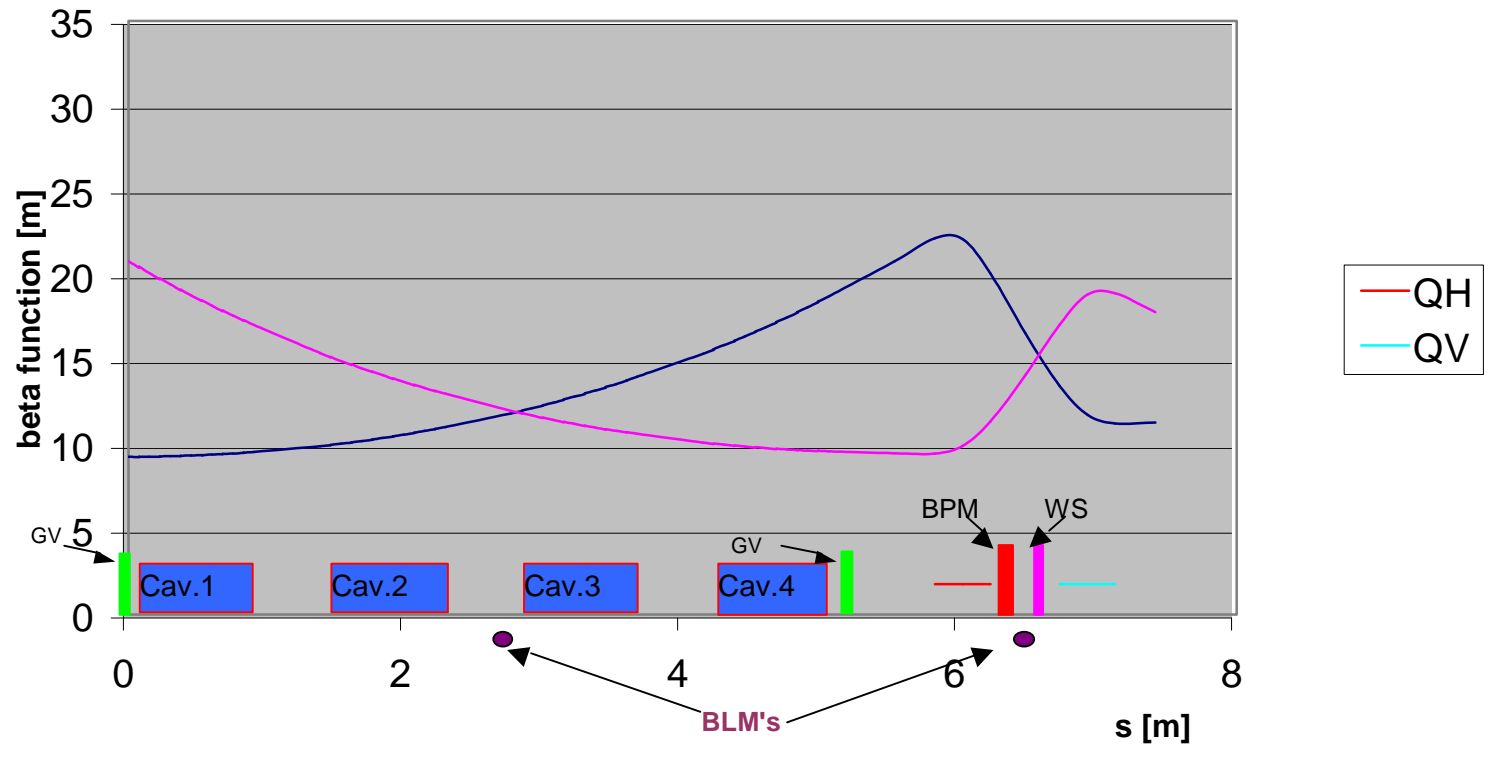
SCL high beta period #19



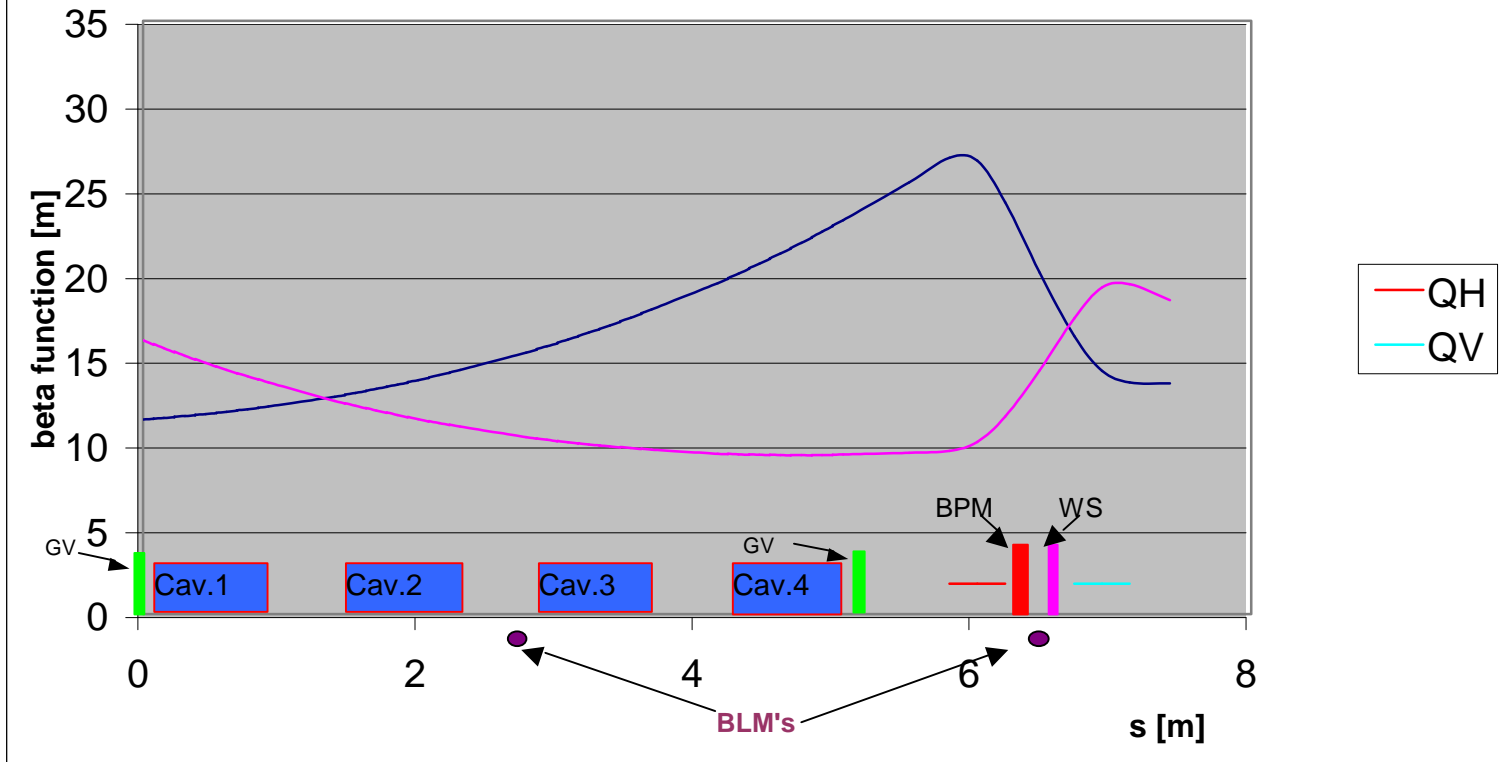
SCL high beta period #20



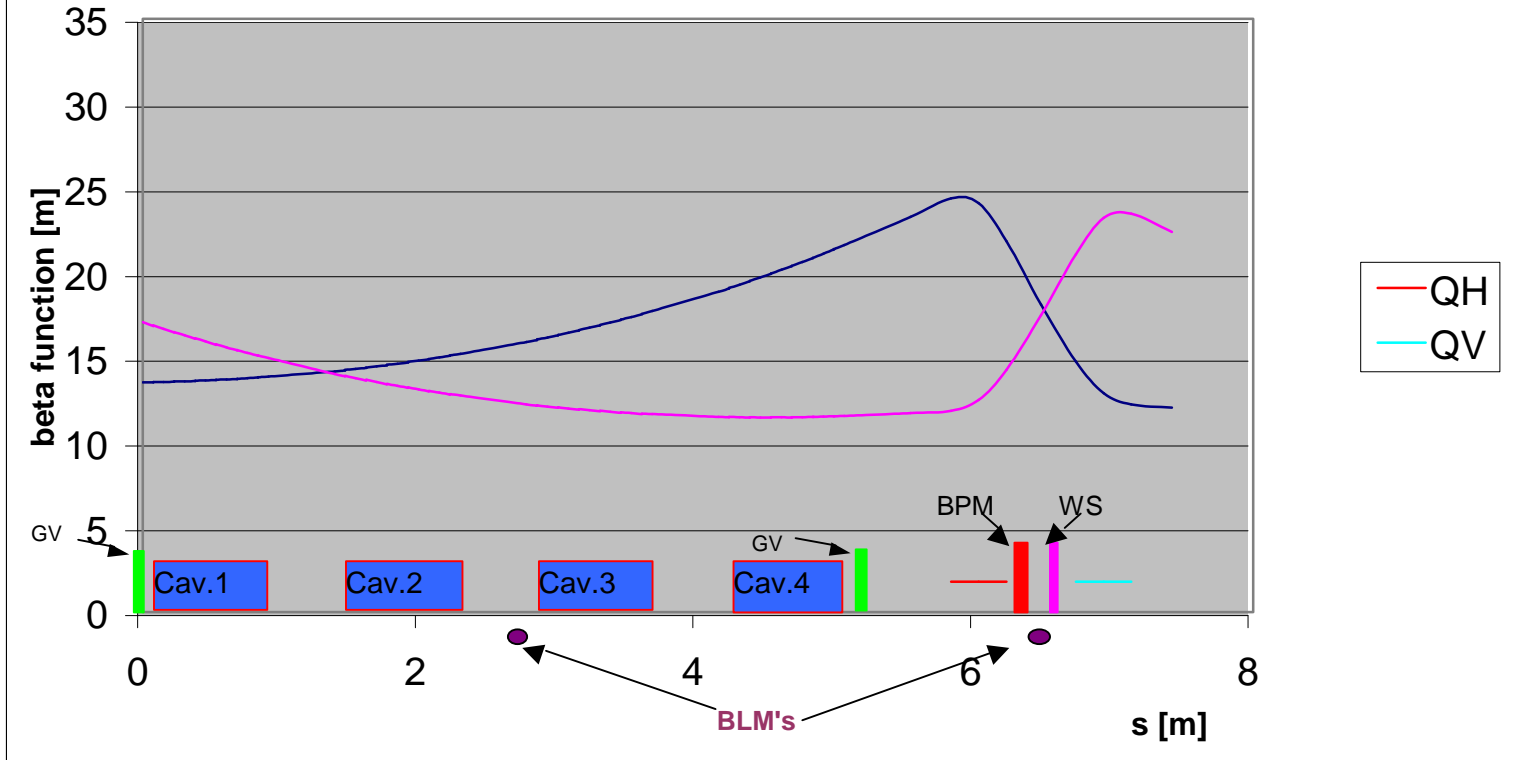
SCL high beta period #21



SCL high beta period #22



SCL high beta period #23



SCL (empty slots behind #23)

