HIGH-ENERGY COLLIDER PARAMETERS: e^+e^- Colliders (II)

The numbers here were received from representatives of the colliders in 1993 or early 1994. Numbers are subject to change. Quantities are, where appropriate, r.m.s. H, V, and, s.c. indicate horizontal and vertical directions, and superconducting.

	BEPC (China)	VEPP-4M (Novosibirsk)	TRISTAN (KEK)	SLC (SLAC)	LEP (CERN)
Physics start date	1989	1994	1987	1989	1989
Maximum beam energy (GeV)	2.2	6	32	50	55
Luminosity (10^{30}cm^{-2}s^{-1})	10	50	37	0.35	11
Time between collisions (μs)	0.8	0.6	5	8300	22
Energy spread (units 10^{-3})	0.58	1	2.3	3	1.0
Bunch length (cm)	≈ 5	5	1.5	0.1	1.8
Beam radius (10^{-6} m)	H: 926 V: 61	H: 1000 V: 30	H: 280 V: 8	H: 2.5 V: 0.8	H: 200 V: 8
Free space at interaction point (m)	± 2.5	± 2	± 2.51	± 2.8	± 3.5
β^*, amplitude function at interaction point (m)	H: 1.3 V: 0.085	H: 0.75 V: 0.05	H: 1.0 V: 0.04	H: 0.01 V: 0.006	H: 1.00 V: 0.04
Interaction regions	2	1	4	1	4