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

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.

	VEPP-2M	DAΦNE	ϕ FACTORY (UCLA)	ϕ FACTORY (Novosibirsk)
Physics start date	1992	1996	?	1997
Maximum beam energy (GeV)	0.7	2×0.510 (1.5 c.m. max.)	0.18×1.5	0.55
Luminosity (10^{30}cm^{-2}s^{-1})	6	135(→540)	10	1000
Time between collisions (μs)	0.03	0.0108(→0.0027)	—	0.06
Bunch length (cm)	3	3.0	—	1
Beam radius (10^{-6} m)	H: 400 V: 10	H: 2100 V: 21	—	H: 65 V: 65
Free space at interaction point (m)	±1	±0.46	—	±2
β^*, amplitude function at interaction point (m)	H: 0.48 V: 0.04	H: 4.5 V: 0.045	Lo E: H/V: 0.50/0.02 Hi E: H/V: 1.00/0.04	H: 0.01 V: 0.01
Interaction regions	2	2	1	1