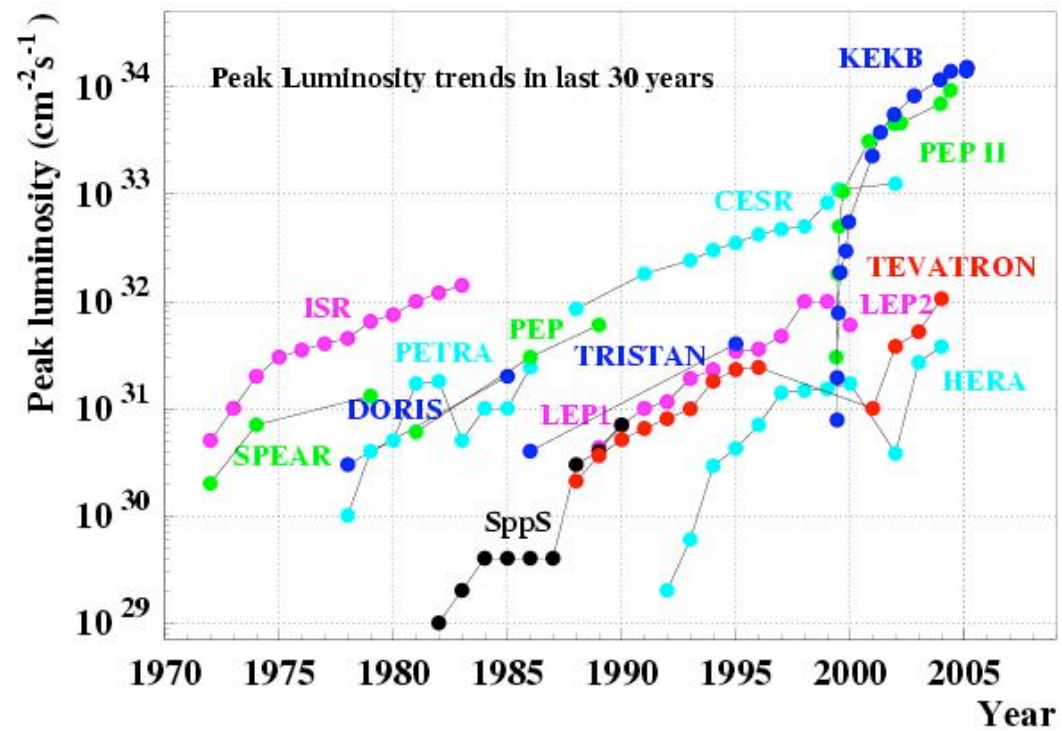


# Overview



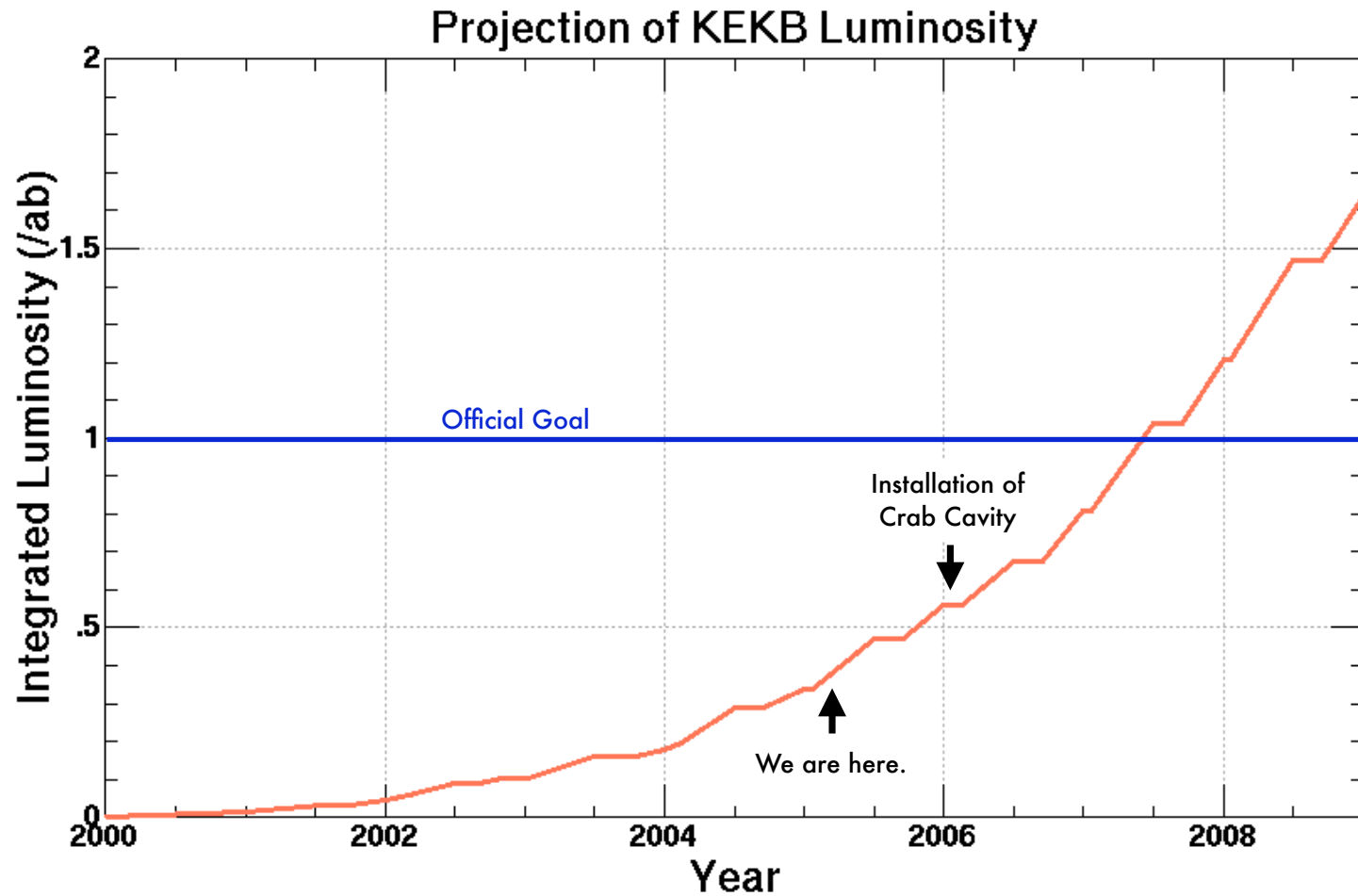
2/21/2005 K. Oide @ KEKB ARC

## Since Last KEKB-ARC/LCPAC, KEKB achieved:

- 31% higher peak luminosity (15.2 vs. 11.6) /nb/s
- 32% higher daily luminosity (1083 vs. 819) /pb
- 85% more total luminosity (364 vs. 197) /fb
  - Growth becomes slower, but not yet saturated.

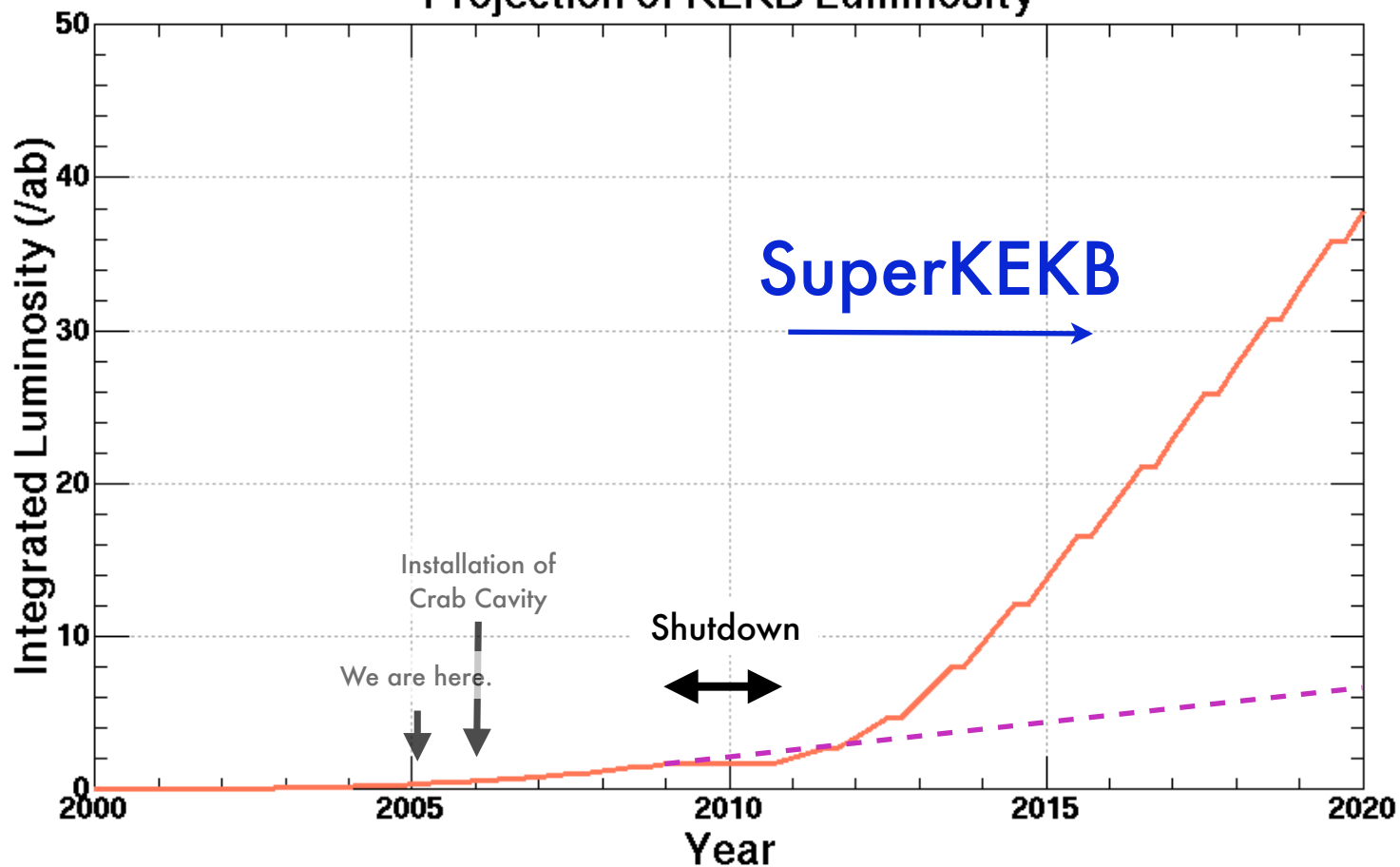
# Issues for further growth

- Crab Crossing (many issues: this afternoon)
- Higher current:
  - More bunches? – failed many times in the past. E-cloud or anything else?
  - Are present components durable?
    - Bellows and gate valves: once broken, at least 2 days are lost. Without spare parts, 2 months are lost.
    - HOM absorbers: Both ferrite and SiC absorbers were damaged at dummy chambers for Crab.
    - Only experiences tell how far we can go anyway.



- 550 /fb will be reached before the Crab Cavity.
- The Official Goal ( $=1$  /ab) will be achieved before Summer 2007.

### Projection of KEKB Luminosity



- Shutdown for 18-26 months in 2009-2010 for upgrade.
- 0.6  $/ab/month$  in 2020.



Future of KEKB (& KEK) is foggy, not  
due to our performance.

- Result of physics at 1 /ab.
- International demand on the B-Physics.
- Other projects: J-Parc, ILC, Light Sources....
- Decision should not be delayed:
  - Production period needed before shutdown
  - Aged components (& people!) since TRISTAN require replacement anyway.