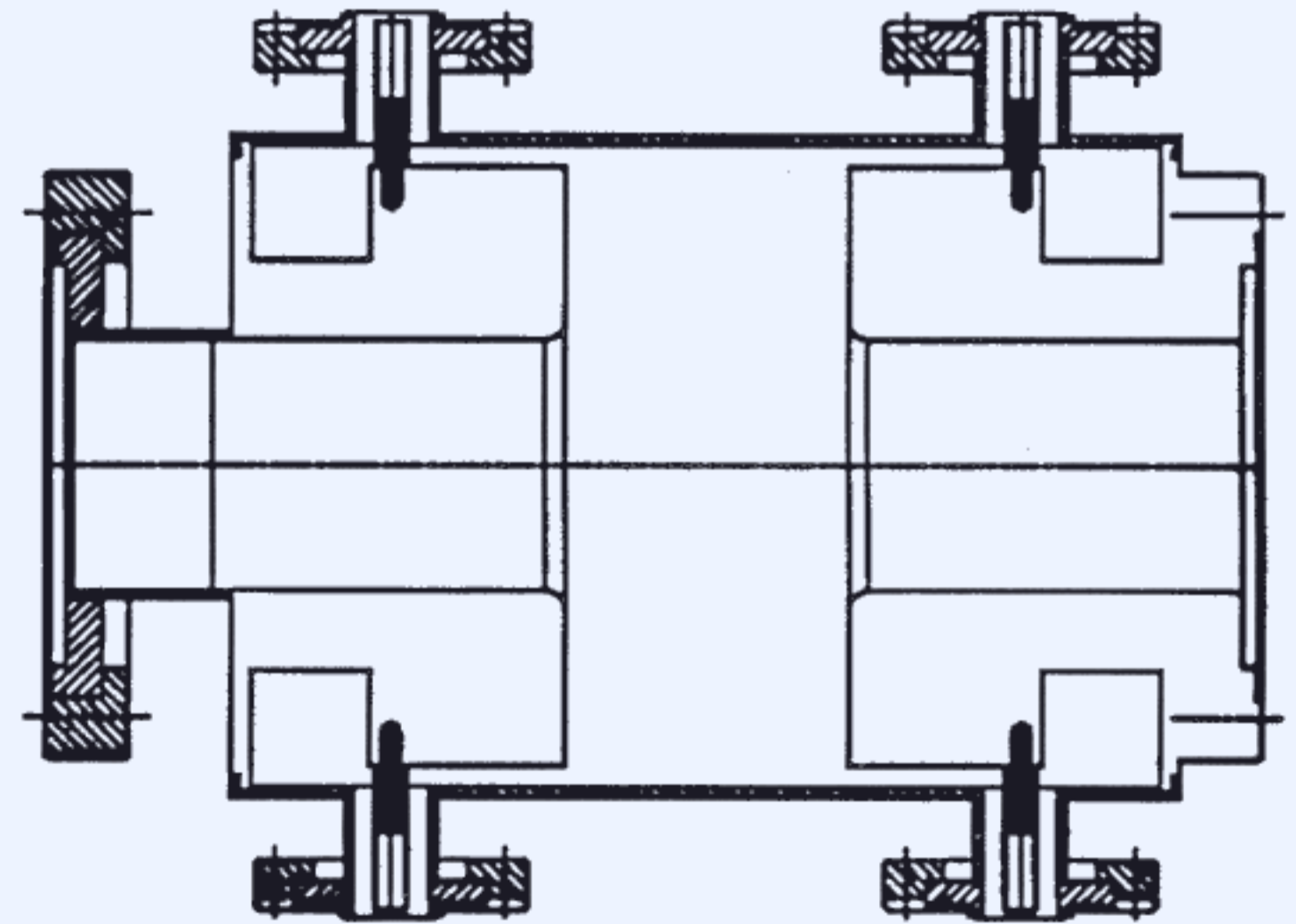
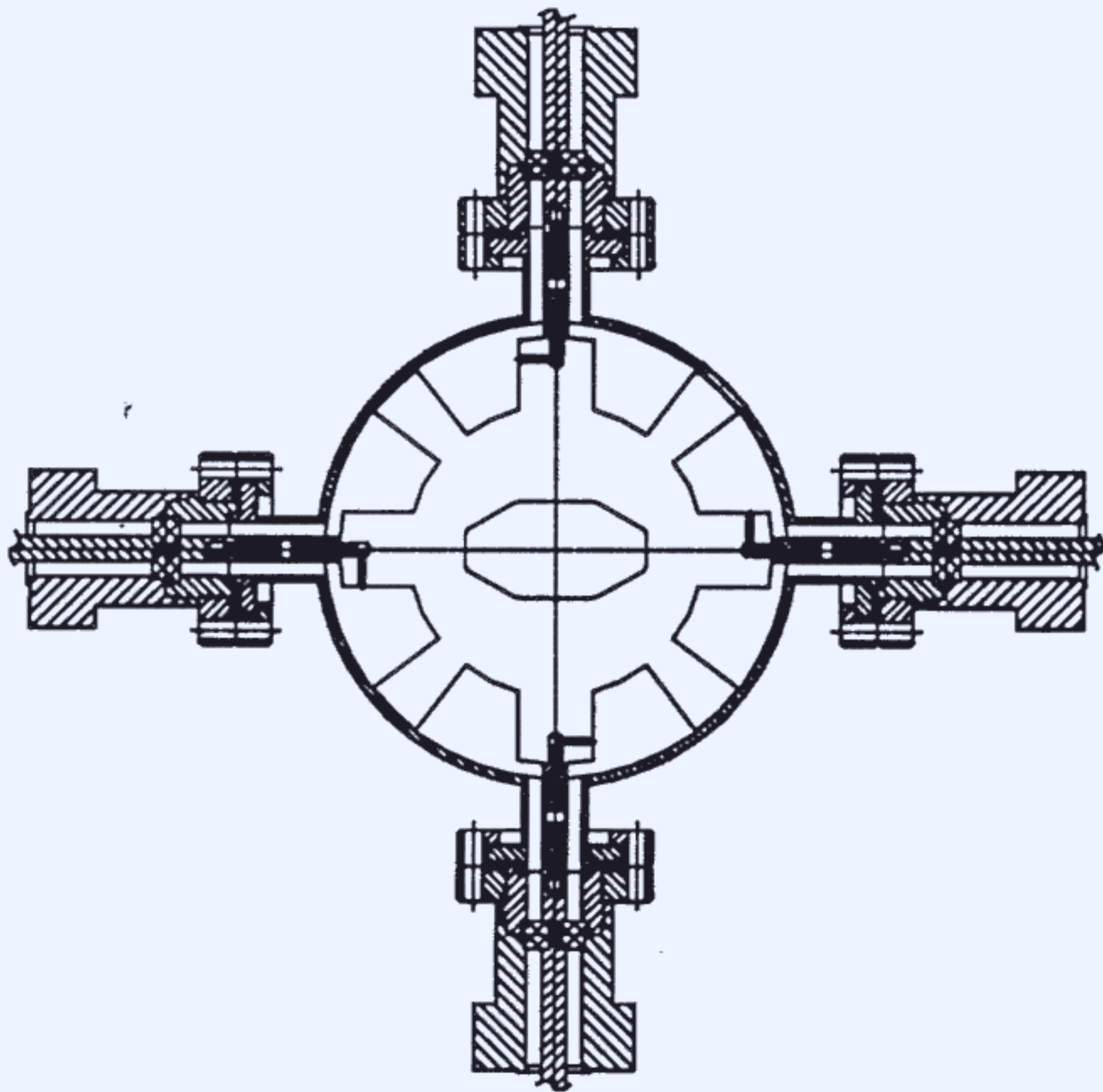


Quick Multibunch Review - BESSY-II

S. Khan, T. Knuth

- longitudinal:
 - before installation of Landau cavities
mode ~ 13 , easily controlled by feedback
 - after installation of Landau cavities
mode ~ 281 or 0 , under certain conditions
not controllable
- horizontal and vertical:
 - resistive wall, damped by chromaticity $4-5$ or
by feedback at chromaticity ~ 1

Longitudinal feedback kicker cavity



Longitudinal Feedback System at BESSY-II

Digital bunch-by-bunch feedback
same as ALS, PEP-II, DAΦNE,
PLS, and SPEAR (J.Fox et al.).
Modified DAΦNE kicker.

Commissioned Jun-Oct 1999.

Description:

Phase information digitized at 500 MHz
and downsampled by factor 31
FIR filter running on 40 DSPs
Result stored in memory,
QPSK modulated and applied to
the kicker cavity

