

# STATUS OF FRASCATI COLLABORATION

A. Ghigo

# CTF3 LNF Collaboration

Optics and modeling

C.Biscari, M.Boscolo, C.Milardi,  
M.A.Preger, F.Sannibale

Beam Dynamics  
and kickers

D.Alesini, A.Gallo, A.Ghigo,  
F.Marcellini, M.Zobov

Diagnostics

A.Drago, M.Serio, A.Stella

Magnets - Engineering

C.Sanelli

Control system

G.Di Pirro, G.Mazzitelli, A.Stecchi

Vacuum

A.Clozza

Responsible of the INFN special  
project NTA  
(New Acceleration Techniques)

M.Napolitano

# Present Status

- Combiner Ring lattice frozen, apertures defined, second order isochronicity and chromaticity correction obtained.
- Delay Loop lattice: second order isochronicity obtained.
- Transfer Line design started
- RF Deflector: beam dynamics computer code completed, beam loading studied in some special cases.
- Coherent Synchrotron Radiation - dipole vacuum chamber dimensions fixed.
- Impedance budget in progress, maximum value of  $Z/n \sim 0.33 \Omega$ . Resistive wall contribution calculated (aluminum vacuum chamber).

- Extraction kicker electromagnetic structure simulated (HFSS)  
Prototype realized and measured.
- Combiner ring Diagnostics: severe constraints on impedance  
and dynamic range (BPM). Assessment of requirements.
- Magnetic calculations of the wiggler magnet are completed,  
mechanical design is in progress.

## Possible prototype and test activity for 2001

- 2 RF deflectors "Lengeler" structure (ready for EPA measurements ?).
- Extraction kicker vacuum prototype and power pulser.
- Beam Position Monitor prototype, electronics for acquisition.
- Shielded bellows prototype.
- Vacuum chamber: pump section with RF shielding.

# Information $\Leftrightarrow$ Files exchange

- CAD version of: building plan, magnets, supports.
- Alignment network.
- Control system standards.
- Power supplies status.
- RF deflector sources.
- Timing distribution