Frequency Map Analysis Workshop

Orsay, April 1st and 2nd 2004
LURE, Building 209D, room 110

Thursday April, 1st :

Chairman : D. Robin

9:00-9:15   Welcome and Introduction to the target of the workshop
A. Nadji (SOLEIL)

9:15-10:00   Frequency Map Analysis
J. Laskar (IMCCE)

10:00-10:30   Guiding lines for computing and reading a Frequency Map and new FMA
calculations for SOLEIL including Insertion Devices effects.
L. Nadolski (SOLEIL)

10:30-11:00   *Discussion*

11:00-11:20   Coffee break

(1) Use of the FMA at the level design of a lattice

Chairman : L. Nadolski

11:20 -11:35   FMA calculation for the ALS
D. Robin (ALS)

11:35-11:50   Frequency maps for designing proton accelerators
Y. Papaphilippou (ESRF)

11:50-12:05   Role of the FMA in the choice of the working point of SOLEIL
M. Belgroune (SOLEIL)

12:05 -12:50   *Discussion*

12:50-14:00   Lunch

(2) Experimental Frequency maps

Chairman : L. Farvacque

14:00-14:45   FMA experiments at the ALS
D. Robin (ALS)

14:45-15:30   Measured and calculated frequency maps for the BESSYII storage ring
P. Kuske (BESSYII)

15:30-15:45   Recent experimental Frequency maps at Bessy II and SLS
               M. Belgroune (SOLEIL)

15:45-16:15   *Discussion*

16:15-16:45   Coffee break

16:45-17:15   Experimental Frequency Maps for the ESRF Storage Ring
               Y. Papaphilippou (ESRF)

(3) Diagnostics and technical details of the measurements

Chairman : P. Kuske

17:15-17:30   Description of the experimental set up at ESRF
               L. Farvacque (ESRF)

17:30-17:45   Description of the experimental set up at the SLS
               M. Munoz (SLS)

17:45-18:30   *Discussion*

19:30   rendezvous to go to the restaurant

20:00   Dinner

Friday, April 2nd:

Chairman : Y. Papaphilippou

9:00-9:30   Comparison between simulation and experiment on injection beam loss in
               the SPring8 storage ring
               H. Tanaka (SPring8)

9:30-9:50   Analyzing combined space charge and lattice nonlinearities based on an
               experiment at the CERN PS
               G. Franchetti (GSI)

9:50-10:10   Frequency Map Analysis and Hilbert Transform for experimental resonance
               investigation at Elettra.
               S. Di Mitri (Elettra)

10:10-10:40   *Discussion*

10:40-11:00	Coffee break

Chairman : J. Laskar

11:00-11:30   Nonlinear correction steering of the LHC using Harmonic analysis
                     F. Schmidt (CERN)

11:30-12:00   Studies on lattice calibration with frequency analysis of betatron oscillations
                     R. Bartolini (DIAMOND)

12:00-12:30	*Discussion*

12:30-14:00	Lunch

Chairman : A. Ropert

14:00-14:15   Refinements of the non-linear lattice model for the BESSYII storage ring
                     P. Kuske (BESSYII)

14:15-15:00   Global discussion on the importance of a very detailed model of the
                     nonlinear fields

Chairman : A. Nadji

15:00-15:30   General discussion, future plans, collaboration,…

15:30-16:00   Conclusion
                     J. M. Filhol (SOLEIL)

END OF THE WORKSHOP