DISCUSSION 2 : MONDAY AFTERNOON (16.30HRS - 18.00HRS)

Emittance Measurement Techniques

I. Physical questions.

Short review of the existing techniques, methods and approaches (imaging, interference, projection, betatron coupling) with their advantages and limitations.

New promising methods of emittance diagnostics (short contributions / messages from participants are expected).

How to go from beam profile (size, divergence, etc.) measurements to emittance ? Problems of indirect measurements.

II. Practical questions.

Emittance, brightness (brilliance), luminosity are very important "passport" characteristics of an accelerator.
In practice, however, lack of time, man-power, sometimes low priority, make it not so easy to construct and maintain a good, reliable emittance diagnostic system.
How this situation can be improved ?

What can be shared (ideas, software, hardware, personnel) ?

How to shorten a long way from a bright idea to a reliable system ?

Can final beam users (e.g. SR users) contribute / share their diagnostics systems or data ?