



Séminaire du Laboratoire de l'Accélérateur Linéaire

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The coupling impedance will shortly be forty-seven, but it does not look its age

On November 1966 in the CERN internal report, ISR/66-35, the groundings for the characterizing the accelerator behaviour relevant to the beam stability were established : the longitudinal coupling impedance concept was born. Its birth was contemporary to the invention of the universal stability maps which are complementary the coupling impedance concept. This paper starts with the following sentence : Let us assume that the electrical action on an ion beam of a discontinuity in a tank is that of an impedance. Up to now there is no better definition. Later on the transverse coupling impedance was defined. Nowadays the conflict between the stability maps and the coupling impedance is increasingly exacerbating : the requirements for high intensity and highly collimated beams impact against the increase of equipment in the vacuum tank. The problem of calculation and measurement of the coupling impedance will be touched.

Salle 101 du LAL - Bât. 200, Orsay

Thé et café seront servis 1/4 h avant le séminaire



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