

Impedance of DAΦNE Shielded Bellows, A. GALLO, A. GHIGO, F. MARCELLINI, B. SPATARO, M. ZOBOV, INFN-LNF, L. PALUMBO, Rome University and INFN-LNF - In order to avoid sliding contacts in the DAΦNE bellows design, the bellows screen is made of thin strips oriented in the vertical plane and separated by small gaps. The strips are produced by a hot forming method and have a waved shape, allowing both the longitudinal expansion and the horizontal shift. The results of numerical simulations and impedance measurements for the shielded bellows are presented. The methods to eliminate and damp the residual Higher Order Modes in such a complicated structure are discussed. The possible power losses and impact of the bellows impedance on the beam dynamics are estimated.