

**Status of the Superconducting RFQ Project for the Legnaro New Positive Ion Injector**, G. BASSATO, A. BATTISTELLA, M. BELLATO, G. BEZZON, G. BISOFFI, S. CANELLA, M. CAVENAGO, F. CERVELLERA, F. CHIURLOTTO, M. COMUNIAN, R. CORTESE, A. DAINELLI, A. FACCO, P. FAVARON, G. FORTUNA, S. GUSTAFSSON, A. LOMBARDI, M.F. MOISIO, V. PALMIERI, R. PENGO, A. PISENT, M. POGGI, A.M. PORCELLATO, L. ZIOMI INFN-LNL; I. KULIK, ILTPE Kharkov; A. KOLOMIETS, ITEP - The new positive ion injector for the ALPI Complex upgrading has been founded and is in its design phase. The aim of the injector is to accelerate ions with masses of the order of 200 and high charge states from the ECR source to ALPI covering the  $\beta$  range from 0.009 to 0.055. The chosen structures are two superconducting RFQ's operating at 80 MHz, followed by QWR's at the same frequency. The paper describes the state of the project starting from the beam dynamics and the cavities design and covering all the technological aspects.