

## Study of ion mobility of gas mixtures.

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The measurement method and initial results will be presented. Three unstudied gases were explored - CF<sub>4</sub>, Xe –CF<sub>4</sub> and Ar –CF<sub>4</sub>. The ion mobility in this two gaseous mixtures are LCTPC Collaborations object of interest. The measurements were performed in Laboratory of Instrumentation and Experimental Particle Physics –LIP, Coimbra, Portugal. This Laboratory has unique device for studying ion mobility [1,2], thanks to which it has already published many results of ion mobility in different gases.

### References

[1] A.N.C. Garcia, P.N.B. Neves, A.M.F. Trindade, F.P. Santos and C.A.N. Conde, A new contribution to the experimental measurement of the N<sup>+4</sup> and N<sup>2+</sup> ion mobility in N<sub>2</sub> at 298K, Jinst 7 (2012) P02012

[2] P.N.B. Neves, C.A.N. Conde and L.M.N. Távora, Experimental measurement of the mobilities of atomic and dimer Ar, Kr and Xe ions in their parent gases, J. Chem. Phys. 133 (2010) 124316

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