Bi-Lipschitz and differentiable sufficiency of weighted jets

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In this work we study bi-Lipschitz and differential sufficiency in the set of weighted jets of map germs of weighted degree. Our main result improves the degree of sufficiency of jets in the classical jet space obtained by F. Takens and by L.A. Fávaro-J.C.C. Martins. Moreover, we give a condition for the bi-Lipschitz sufficiency in both the weighted and non-weighted cases. Bi-Lipschitz sufficiency was not considered in those autors cited above. This is a joint work with M.J. Saia and C.H. Soares Junior. This work has been partially supported by grant 2019/21181-0 São Paulo Research Foundation (FAPESP)