1152-55-114 Cesar A. Ipanaque Zapata* (cesarzapata@usp.br), UNIVERSIDADE DE SÃO PAULO, ICMC-USP, São Carlos, SP 13566-590, Brazil. Collision-free optimal motion planning algorithms.

We present optimal algorithms which can be used in designing practical systems controlling motion of many rigid bodies moving in space without collisions. The motion planning algorithms we present in this work are easily implementable in practice. Joint work with Jesús González. Acknowledgements: We would like to thank FAPESP Grant #2018/23678-6 for financial support.

(Received August 28, 2019)