Ritu Dhankhar* (ritu.dhankhar26@gmail.com), 366, CH 4, BITS Pilani K K Birla Goa Campus, NH-17 B, Zuarinagar, South Goa, Goa 403726, India, and Prasanna Kumar. On the location of zeros of polynomials. Preliminary report.

In this work, we prove a necessary and sufficient condition for a polynomial P(z) to have all its zeros inside the open unit disc in terms of an inequality involving the derivative of the reciprocal polynomial of P(z) and the reciprocal of the derivative of P(z). We also derive some generalizations and extensions of the classical Theorem of Laguerre. (Received August 23, 2021)