1046-85-1188   **Tiancheng Ouyang** (`ouyang@math.byu.edu`), 292TMCB, Brigham Young University, Provo, UT 84602, and **Duokui Yan*** (`duokuiyan@gmail.com`), 292TMCB, Brigham Young University, provo, UT 84602. *collinear four-body problem.*

The regularization of the collinear SBC is showed by using a different method. Also, we show the existence of two constants in the solution which have special meanings. Secondly, we discover a schubart-like periodic orbit for non-symmetric masses with [m1 m2 m3 m4]=[1 1 1 m]. The analytic proof for the existence of such periodic orbits are given and numerical evidence is also provided. (Received September 15, 2008)

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