1067-51-1996   **Shing S So*** (`so@ucmo.edu`), Dept. of Math. & Comp. Sci., University of Central Missouri, Warrensburg, MO 64093. *Morley i△, Morley e△, and their Mother Triangle.*

Let $\triangle ABC$ denote any triangle. Then the triangles whose vertices are given by the points of intersection of the nearside trisectors of $\angle A$, $\angle B$, and $\angle C$ and the points of intersection of the nearside trisectors of the exterior angles at A, B, and C are two equilateral triangles. These triangles are sometimes referred as Morley $\triangle i$ and Morley $\triangle e$ since their vertices lie in the interior and exterior of the mother triangle $\triangle ABC$, respectively. In this paper, we discuss how the Morley $\triangle i$ and Morley $\triangle e$ can be used to characterize the mother triangle. (Received September 22, 2010)