1056-J5-811   **Mike O'Leary*** (`moleary@towson.edu`), Department of Mathematics, Towson University, Towson, MD 21234. *Searching for the home base of a serial criminal.*

We have developed an algorithm that can estimate the location of a serial criminal's home base based on the locations of the elements of the crime series. This algorithm has been implemented in software, and provided to police agencies for use in their investigations. We shall describe the underlying mathematical approach to the problem, demonstrate the software tool, and discuss open questions. (Received September 17, 2009)