1158-03-118 **Can Başkent***, Department of Computer Science, Middlesex University, London, NW4 4BT, United Kingdom. *Learning from and Working with Contradictions in Heuristics.*

Contradictions (or *monsters*) are essential part of Lakatosian heuristics. Depending on the characteristics of monster, the theory is revised. Similarly, Hintikka "brackets" abnormalities in order to obtain a classical, contradiction-free system for epistemic inquiries.

But, if contradictions are such central elements of dynamic heuristics, why are they excluded? If we choose to work with them, how can we achieve it?

In this talk, I will argue that the underlying logic of reasoning for Lakatosian and even Hintikkan heuristics is nonclassical. I will also maintain that it is a kind of logic that is inconsistency-tolerant.

Particularly, I will give an example of how Lakatosian heuristics works and how it is sympathetic to contradictions. Next, I will do the same for Hintikka's interrogative models of inquiry. I will then conclude that meta-mathematical heuristic reasoning must be inconsistency- and incompleteness-tolerant based on the aforementioned cases. This will also substantiate the thesis that inquiry and heuristics are indeed "games" between rational players who may have inconsistent knowledge or incomplete strategies. (Received February 26, 2020)