## 1150-03-130 Graham Priest\* (priest.graham@gmail.com), CUNY Graduate Center, 365 5th Ave, New York, NY 10016. *Gödel's Theorem and Paraconsistency.*

Gödel's first Incompleteness Theorem is often phrased as: any (sufficiently strong) axiomatic arithmetic is incomplete. This is inaccurate: what Gödel's proof shows is that it is either incomplete or inconsistent. Of course, if classical logic is used, then inconsistency implies triviality; so it is natural enough to ignore the inconsistency alternative. However, this is not so if a paraconsistent logic is used. Indeed, it is now known that there are axiomatic arithmetics that are complete, inconsistent, and non-trivial. In this talk, I will explain what these theories a like, and then turn to the question of what one should make of their existence philosophically. (Received July 04, 2019)