1056-01-1860   **Mahmoud H Annaby*** (`mannaby@qu.edu.qa`), Dept Mathematics, Statistics & Physics, Qatar University, Doha, 2713, Qatar. *On Avicenna's Arithmetic.*

Unlike his great contributions in medicine and philosophy, it is believed that Avicenna's mathematical works have no originality and that his contributions are limited to an editing of Euclid's Elements and transforming Nicomachus' Introduction to Arithmetic, in addition to the scattered mathematics in his books on logic, music and astronomy. We aim in this lecture to introduce Avicenna as one of the muslim mathematicians through studying the first essay of his book, The Arithmetic. We study this essay extensively and analyze its mathematical contents, especially arithmetical sequences, perfect, abundant and deficient numbers as well as amicable pairs. We also compare Avicenna's results with the works of other muslim mathematicians, like Al–Bagdadi, Al–Farisi and Al–Kashi. (Received September 22, 2009)