## **Legal Implications of Asteroid Mining**

Aaron Groh<sup>1</sup> and Brieanna Miklaucic<sup>2</sup>

<sup>1</sup>Law Student, Western University, London, Ontario <sup>2</sup>LawStudent, Western University, London, Ontario

**Note:** extended abstract is 500-700 words

**Abstract.** With technology rapidly progressing in relation to space exploration, extra-terrestrial mining is no longerconfined to science fiction but is instead becoming a feasible reality. While industry prepares to mine in space, the absence of a proper legal framework becomes an ever increasing issue. There is not consensus on what the principles enshrined in the Outer Space Treaty mean for space mining and the only international treaty to directly reference resource extraction, the Moon Agreement, is controversial and ratified by only 18 states, none of them spacefaring. There has been considerable agreement between states that extracting space resources is allowed under the Outer Space Treaty, but there remains issues such as a lack of procedures, uncertainty in regards to property rights and differing opinions as to how space mining could be 'for the benefit of all mankind'.

This paper outlines the existing legal framework, both international and national. It details the differing interpretations of the relevant treaties as well as the role of customary law and soft-law principles in governing space mining. It continues to analyse international terrestrial mining laws, The Antarctic Treaty System and the UN Convention on the Law of the Sea, to understand principles and mechanisms that may be applicable to space mining. It then details Canadian and American national laws and Canadian terrestrial mining laws. Next, this paper outlines various proposed approaches to developing space law on resource extraction and suggests that Canada develop national law with a cosmopolitan view that addresses how space mining will benefit all. This would create security for the private sector and contribute to a bottom-up governance framework approach. Further, it is suggested that Canada and the international community continue to develop soft-law governing principles that allow for flexibility and international cooperation as technology continues to advance.