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Radoslav M. Dimitric* (rdimitric@juno.com), Pittsburgh, PA 15230. *MIHAILO PETROVIC AND HIS INTERVAL MATHEMATICS*. Preliminary report.

In this paper I will examine work of Mihailo (Michael) Petrovic in the area of the so-called interval mathematics. This work is not well known the least because it is mainly written in Serbian and dates at least as far back as 1932. The basic idea is that quantities like real numbers are not known as precise decimal expansions (say for irrational numbers), but we can consider an interval where such a number resides, as a certainty or precise locator. Petrovic constructs this interval mathematics and shows how to perform any operations with such intervals, from the simple kind to the infinitesimal and integral kind. This work is not only important from historical point of view, but it is a distant but significant predecessor of many computational aspects used today, including the so-called fuzzy mathematics. Petrovic cannot be omitted from the small set of significant contributors in these areas. How many of his constructions are useful, but still unused today remains to be scrutinized in more detail. Translation into English of Petrovic' related work on interval mathematics is in preparation and will be available from www.helios-scholar.com (Received July 28, 2009)