1125-05-1353Nathan Bowler, Johannes Carmesin, Shadisadat Ghaderi* (shghaderi@mix.wvu.edu) and
Jerzy Wojciechowski. The Almost Intersection Property for Pairs of Matroids on Common
Groundset.

The theory of finite matroids was introduced by Whitney to capture and generalize the concept of linear independence in vector spaces. This theory was later generalized to infinite sets in a series of papers and recently it attracts a substantial amount of attention. The most important open problem is the Infinite Matroid Intersection conjecture proposed in 1990 by Nash-Williams. It says that each pair of matroids on the same ground set has the Intersection Property and is a suitable restatement in the infinite case of the well-known finite matroid intersection theorem of Edmonds. Some progress was made towards proving this conjecture, but it is still open even for finitary matroids on a countable ground set. We introduce the Almost Intersection Property, which is in essence, the Intersection Property modulo finite sets. We prove that the Almost Intersection Property implies the Intersection Property and present some corollaries of that result. (Received September 16, 2016)