Ratio sets of images of integral forms and the question of their denseness in $\mathbb{Q}_p$ for infinitely many p

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A ratio set of a set S is the set of all possible quotients of the elements in S. Given an integral form F, we let S be the set of all its values evaluated at integers. We investigate whether the ratio set of S is dense in $\mathbb{Q}_p$ for infinitely many p. We give some criteria when this is the case, give examples when this does not happen and explain our predictions more generally. This is joint work with Deepa Antony, Rupam Barman, and Daniel Širola, and it is inspired by the previous work of Piotr Miska, Nadir Murru, and Carlo Sanna.