

On the uniqueness of extension of twoparametric family of $D(4)$ -triples

*Alan Filipin** (Univ. Zagreb), *Bo He* (Neijiang Normal University), *Alain Togbé* (Purdue University)

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A set of m positive integers is called a $D(4)$ - m -tuple, if the product of any two of its distinct elements increased by 4 is a perfect square. There is a conjecture that $D(4)$ -triple $\{a, b, c\}$ can be extended to a $D(4)$ -quadruple $\{a, b, c, d\}$ such that $d > \max\{a, b, c\}$ in the unique way. That was proved for $D(4)$ -triple $\{1, 5, 12\}$ and various parametric families of $D(4)$ -triples. In this talk we will prove the conjecture for one twoparametric family of $D(4)$ -triples.