The recurrence theorem of Frenet formulae

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Abstract.

In this paper we generalize Frenet trihedron and we provide some other classes of trihedrons, called Frenet trihedrons of order $n, n \ge 1$. Moreover we prove that those trihedrons can be defined recurrently and we emphasize their role in the study of the generalized helices of order n. As practical applications we present the influence of the recurrence theorem in some interdisciplinary domains like physics, chemistry and biology.

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