IDEAL CONVERGENCE OF SEQUENCES OF BI-COMPLEX NUMBERS

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Abstract. We investigated some of the algebraic properties of the limits of I-convergent sequences of bi-complex numbers, and we explore several geometric properties such as convexity, solidity, monotonicity, balanced set, and absorbing set of I-convergent sequence spaces of bi-complex numbers. Additionally, we provide nontrivial examples to illustrate geometric properties absent in certain I-convergent sequence spaces of bi-complex numbers.