

On the digital Hopf images and monoid isomorphisms

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Abstract. In this article, we develop the structures of digital Hopf images, and digital homotopy associative and commutative Hopf images. We find some basic properties of digital Hopf functions along with digital multiplications, and investigate methods of how to generate new digital homotopy associative and commutative Hopf images from the old ones. We also construct a monoid isomorphism between sets of digital homotopy classes.

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