In more recent years, activity in the area of the complex differences and the complex difference equations has fleetly increased.

This journal has set up a column of this special issue. We were pleased to invite the interested authors to contribute their original research papers as well as good expository papers to this special issue that will make better improvement on the theory of complex differences and difference equations.

In this special issue, many good results are obtained.

Difference equations are widely applied to mathematical physics, economics, and chemistry. In this special issue, Z.-B. Huang and R.-R. Zhang, J. Li et al., and L. Gao and Y. Wang investigate the growth, a Borel exceptional value of meromorphic solutions to different types of higher order nonlinear difference equations, respectively; B. Chen and S. Li investigate the Schwarzian type difference equation. D. Liu et al., Z. Mao and H. Liu, and S. Li and B. Chen investigate unicity of meromorphic functions concerning different types of difference operators. Recently, many difference analogues of the classic Nevanlinna theory are obtained.

In this special issue, X.-M. Zheng and H. Y. Xu obtain a differential difference analogue of Valiron-Mohonko theorem. Related topics with complex difference, J. E. Kim and K. H. Shon investigate the regularity of functions on dual split quaternions in Clifford analysis and the tensor product representation of polynomials of weak type in a DF-space; Q. Zhang and Z. Liu et al. investigate different types of real difference equations, respectively; L. Shen and Q. Xu investigate stochastic differential equations.

This special issue stimulates the continuing efforts to the complex differences and the complex difference equations.

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