

Q-ANALOGUE OF RIORDAN REPRESENTATION

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(Joint work with Naim Tuglu)

In [1], Shapiro and et al. formed a group which is called Riordan group. In [2], the authors proved that q -Riordan matrix can be represented by aid of the Eulerian generating functions and they defined q -Riordan group. In this study, using new binary operations, denoted by $*_q$ and $*_{1/q}$, and special q -operators, we obtain q -analogue of Riordan representation. Also we show that any q -matrices can be written as a pair of q -Riordan by aid of this representation. Specially, we get q -analogue of Riordan representation of q -Pascal matrix and inverse matrix.

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