Recognizable and Rational Formal Power Series
with General Discounting

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We investigate the behaviours of weighted automata with general discounting; these are the skew (formal power) series. Recently, it was shown that the recognizable skew series are precisely the rational skew series [DK03]; this generalizes a classical result of Kleene-Schützenberger [Kle56, Sch61]. Here, we show that a very special case of Schützenberger's result suffices to deduce both its general version and the skew generalization.

References

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