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Séries de Engel et fractions continuées

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Abstract. Relations between continued fraction expansion and Engel's series of a real number are investigated. Product of matrices corresponding to these expansions leads to transducers which convert the continued fraction expansion of any irrational number to its Engel's series and reciprocally. Finally, new results about Lucas numbers, Fredholm numbers and various transcendental numbers with bounded or unbounded partial quotients are obtained.

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