A bijective proof of Macdonald's reduced word formula

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Résumé

We describe a bijective proof of Macdonald's reduced word identity using pipe dreams and Little's bumping algorithm. The proof extends to a principal specialization of the identity due to Fomin and Stanley. Our bijective tools also allow us to address a problem posed by Fomin and Kirillov from 1997, using work of Wachs, Lenart and Serrano- Stump.

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