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## 广义面上地转方程的全局解和重排 (曹道民)

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In this paper, we study the existence of rotating and traveling wave solutions for the generalized surface quasi-geostrophic (gSQG) equation. The solutions are obtained by maximization of the energy over the set of rearrangements of a fixed function. The rotating solutions take the form of co-rotating vortices with N-fold symmetry. The traveling-wave solutions take the form of translating vortex pairs. Moreover, these solutions constitute the desingularization of co-rotating N point vortices and counter-rotating pairs. Some other quantitative properties are also established.

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