Supremum of block entanglement for symmetric Gaussian states

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For a system composed of permutationally symmetric Gaussian modes, by identifying the boundary of valid states and making necessary change of variables, the existence and exact value of the supremum of logarithmic negativity (and negativity likewise) between any two blocks can be shown analytically. Involving only the total number of interchangeable modes and the sizes of respective blocks, this result is general and easy to be applied for such a class of states.

[1] J.-Y. Kao and C.-H. Chou, *Supremum of block entanglement for symmetric Gaussian states*, Sci. Rep. **8**, 7394 (2018).