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A.O.(Author One) and A.T. (Author Two) contributed equally to this work (remove if not applicable).

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Figure 1 shows an example of how to insert a column-wide figure. To insert a figure wider than one column, please use the \begin{figure\*}...\end{figure\*} environment. Figures wider than one column should be sized to 11.4 cm or 17.8 cm wide.

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Please note that this option may run into problems with floats and footnotes, as mentioned in the cuted package documentation. In the case of problems with footnotes, it may be possible to correct the situation using commands \footnotemark and \footnotetext.

$$(x+y)^3 = (x+y)(x+y)^2$$

$$= (x+y)(x^2 + 2xy + y^2)$$

$$= x^3 + 3x^2y + 3xy^3 + x^3.$$
[1]



Fig. 1. Placeholder image of a frog with a long example caption to show justification setting.

Table 1. Comparison of the fitted potential energy surfaces and ab initio benchmark electronic energy calculations

Species	CBS	CV	G3
Acetaldehyde	0.0	0.0	0.0
2. Vinyl alcohol	9.1	9.6	13.5
3. Hydroxyethylidene	50.8	51.2	54.0

nomenclature for the TSs refers to the numbered species in the table.

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Fig. 2. This caption would be placed at the side of the figure, rather than below it.

## **Acknowledgments**

Please include your acknowledgments here, set in a single paragraph. Please do not include any acknowledgments in the Supporting Information, or anywhere else in the manuscript.

1 Belkin M, Niyogi P (2002) Using manifold stucture for partially labeled classification in Advances

- in neural information processing systems. pp. 929–936.

  2 Bérard P, Besson G, Gallot S (1994) Embedding riemannian manifolds by their heat kernel. Geometric & Functional Analysis GAFA 4(4):373–398.
- Coifman RR, et al. (2005) Geometric diffusions as a tool for harmonic analysis and structure definition of data: Diffusion maps. Proceedings of the National Academy of Sciences of the United States of America 102(21):7426-7431.

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