

## Beyond the cavity

*Tuesday 3 October 2023 09:40 (40 minutes)*

In many of the envisaged applications of strong coupling, especially polaritonic chemistry, open access to the molecules involved is vital, as is independent control over polariton dispersion, and spatial uniformity of the coupling. Existing cavity designs are not able to offer all of these advantages simultaneously. Here we demonstrate an alternative yet simple cavity design that exhibits all the desired features. We hope that our new approach will provide a new platform to both study and exploit molecular strong coupling. Although our experimental demonstration is based on excitonic strong coupling, we also indicate how the approach might be achieved for vibrational strong coupling.

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**Session Classification:** Morning session