

Abstract Submitted
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“Oenodynamic”: hydrodynamic of wine swirling¹ MARTINO RECLARI, MATTHIEU DREYER, STEPHANIE TISSOT, DANAIL OBRESCHKOW, FLORIAN WURM, MOHAMED FARHAT, Ecole Polytechnique Federale de Lausanne — A crucial step in wine tasting is the so called “swirling,” necessary to release the bouquet of the wine: a gentle circular movement of the glass generates a wave propagating along the glass walls, enhancing oxygenation and mixing. Although being used in a large variety of other applications (e.g. cells cultures in orbital shaken bioreactors) this motion is not yet well understood. Using a simplified model we experimentally investigated the shape of the free surface and the mixing, and we identified a group of dimensionless parameters governing the flow.

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