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The universe in a glass of wine

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Quoting a poet, Richard Feynman, Nobel Prize in Physics, writes "The whole universe is in a glass of wine". Wine indeed refers not only to soil biochemistry, plant or fermentation biology, but also to molecular or macromolecular chemistry of metabolites... and to the physical chemistry of interfaces (adsorption, gas diffusion...), physics (effervescence...), climatology, even mathematics, and of course health. In this presentation, we will explore different aspects of wine making by showing how this art turns out to be a formidable echo chamber for many questions from both experimental sciences and humanities. We will focus in particular on the molecular diversity which makes it possible to fingerprint nearly any of the winemaking steps from the vineyard to the bottle, and somehow to read a "memory" of environmental conditions at work at the moment of its birth. Entering into this exploration of wine is measuring the complexity of this universe and the extent of what remains to be discovered ...