CONCLUDING REMARKS

- **Both the experimental and numerical investigations indicate that the free surface boundary condition has a relatively small effect on the bulk flow structure. The main differences appear for both the velocity and temperature fields in the upper part of the cavity.**

- **The numerical models proved their ability to describe most of the experimental features. The main result of this work is the empirical evidence of a two-dimensional recirculating flow present at the free surface.**

- **The physical interpretation of this flow is rather intuitive, exploring the idea of a molecular surface layer. The structure and properties of surface monolayers are functions of the molecular arrangement and their interactions.**

- **Our simple model does not pretend to describe the physics at the surface. Our present aim is rather to indicate that the proper interpretation of some free surface flow patterns may need a reassessment of the standard boundary conditions.**