

## IV Quantum optics and quantum foundations workshop

18-19 March 2004

Departments of Physical Chemistry and Theoretical Physics, UPV-EHU.

Funded by "Vicerrectorado del Campus de Vizcaya (UPV-EHU)"

Information: qfpmufrj@lg.ehu.es

### Program<sup>1</sup>

#### Thursday, March 18th

Chairman: J. G. Muga

Salón de Grados

15:00 *Atom optics experiments with metastable rare gas atoms*

Tilman Pfau (Stuttgart)

16:00 *Quantum arrival times: A theoretical and experimental problem*

Gerhard C. Hegerfeldt (Göttingen)

16:30 Coffe Break

17:00 *Quantum dwell times and their measurement*

Iñigo Egusquiza (UPV-EHU)

17:35 *Towards operational quantum arrival times: Operator normalization and filtering*

Dirk Seidel (Göttingen)

18:10 *Simultaneous arrival of information in absorbing wave guides*

Andreas Ruschhaupt (UPV-EHU)

21:00 Conference dinner

#### Friday, March 19th

Chairman: G. C. Hegerfeldt

Seminar Room of Theoretical Physics

9:30 *Taming Chromium as an ultracold dipolar gas*

Tilman Pfau (Stuttgart)

10:30 *Quantum optical time of arrival model in three dimensions*

Volker Hannstein (Göttingen)

11:00 Coffe break & blackboard session

11:45 *Scattering with smooth potentials in one dimension*

Jens-Timo Neumann (Göttingen)

12:20 *Breakdown of classical conservation of energy in quantum collisions*

J. Gonzalo Muga (UPV-EHU)

12:50 *Closing words by G. C. Hegerfeldt*

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<sup>1</sup>5-minutes breaks between talks except the longer "Coffee break"