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# Time-Resolved Spectroscopy of Energy Transfers in Optoelectronic Media

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Cover photo: *Tree shadow*, by Gabriele Merolli ([www.gabrielemerolli.com](http://www.gabrielemerolli.com))

**Ignacio Yasser Izeddin Aguirre**



# **Time-Resolved Spectroscopy of Energy Transfers in Optoelectronic Media**

ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad van doctor  
aan de Universiteit van Amsterdam  
op gezag van de Rector Magnificus  
prof. dr. D. C. van den Boom  
ten overstaan van een door het college voor promoties  
ingestelde commissie,  
in het openbaar te verdedigen in de Agnietenkapel  
op donderdag 17 april 2008, te 12.00 uur.

door

**Ignacio Yasser Izeddin Aguirre**

geboren te Zaragoza, Spanje

## **Promotiecommissie:**

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The research reported in this thesis was carried out at the Van der Waals-Zeeman Institute for Experimental Physics, University of Amsterdam. Some of the experimental work was performed at the Dutch Free Electron Laser facility for Infrared eXperiments (FELIX) at the FOM Institute for Plasma Physics ‘Rijnhuizen’ in Nieuwegein.

A mi familia, por mantenerme con los pies en el suelo.

*Licht! Mehr licht!*

Attributed to J. W. von Goethe on his deathbed

*OK, so flower-power didn't work... So what? We'll just start again.*

John Lennon

*Parce que moi je rêve, moi je ne le suis pas.*

*[...]*

Léolo Lauzonne