



European Theoretical  
Spectroscopy Facility

# ETSF

## European Theoretical Spectroscopy Facility



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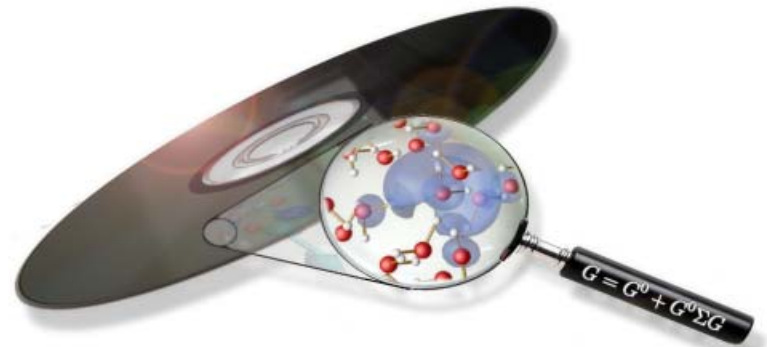
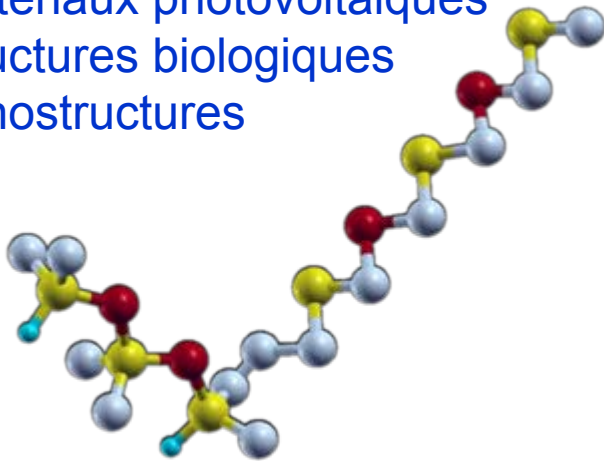
# La Spectroscopie Théorique

Comprendre et prédire les propriétés des matériaux  
A partir de calcul ab initio des excitations électroniques

Les outils:      mécanique quantique  
                         simulation numérique

## Conception et Optimisation

- ✓ composants opto-électroniques
- ✓ matériaux photovoltaïques
- ✓ structures biologiques
- ✓ nanostructures



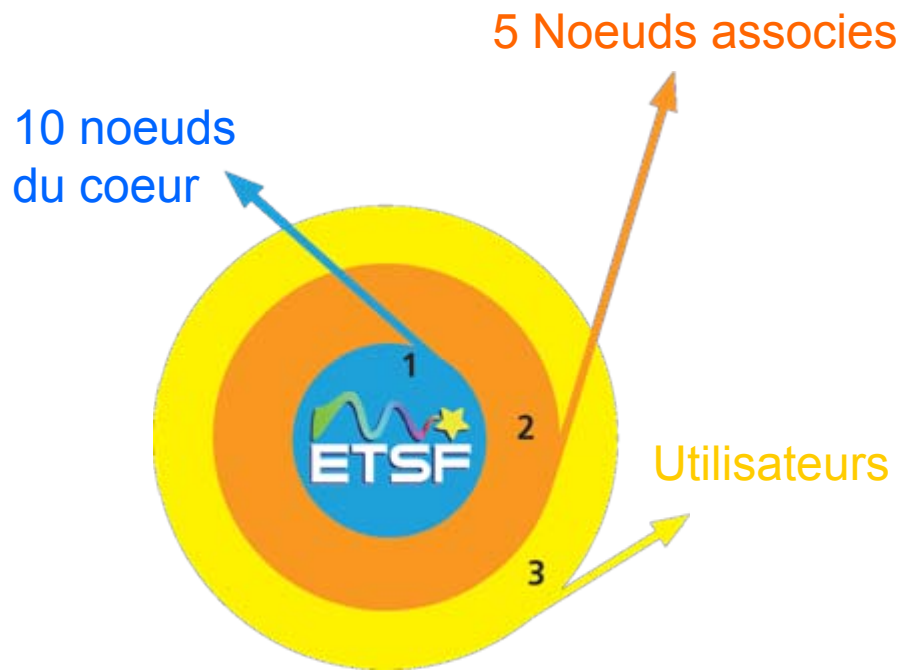


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# A new type of facility!

## A knowledge center for theoretical spectroscopy:

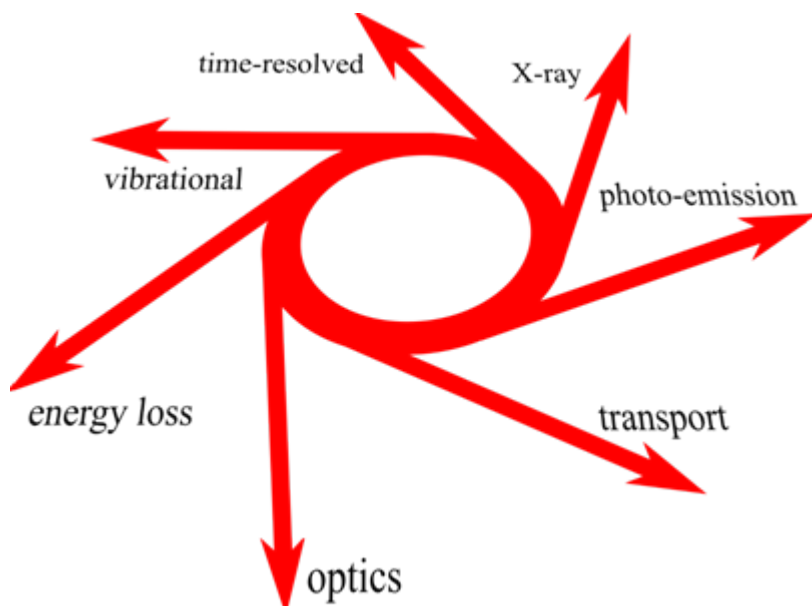
- ▶ carrying out state-of-the-art research
- ▶ gathering the experience and know-how
- ▶ offering its expertise to researchers





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## ETSF Beamlines



[www.etsf.eu](http://www.etsf.eu)

## ETSF services:

- Availability of ETSF codes

[abinit.org](http://abinit.org)



dp<sup>™</sup>



Yambo



et c.

- Biannual calls for proposals

submit  
a proposal

- ▶ on demand training
- ▶ scientific collaboration
- ▶ commissioning of theory and software developments

- Training sessions





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# Le projet ETSF-I3



e-infrastructure ⇒

Project officer depend de la **DG INSFO**  
(**Société de l'Information et Media**)

Date: janvier 2008-December 2010

Coordinateur: Rex Godby (université de York, Royaume Uni)

Budget: 4 375 k€

(3 800 k€ contribution de la Communauté Européenne)



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## Le consortium 11 partenaires

1) 10 laboratoires européens membres  
de l'infrastructure ETSF  
(Nanophase 2000-04, Nanoquanta 2004-08)

2) Barcelona Supercomputing Center

3) En plus du consortium: 5 sous-traitants (les noeuds associés de l'ETSF)

Raisons: moins de partenaires,  
possibilité de transférer de l'argent si un projet  
d'utilisateurs pris en charge par un noeud associé

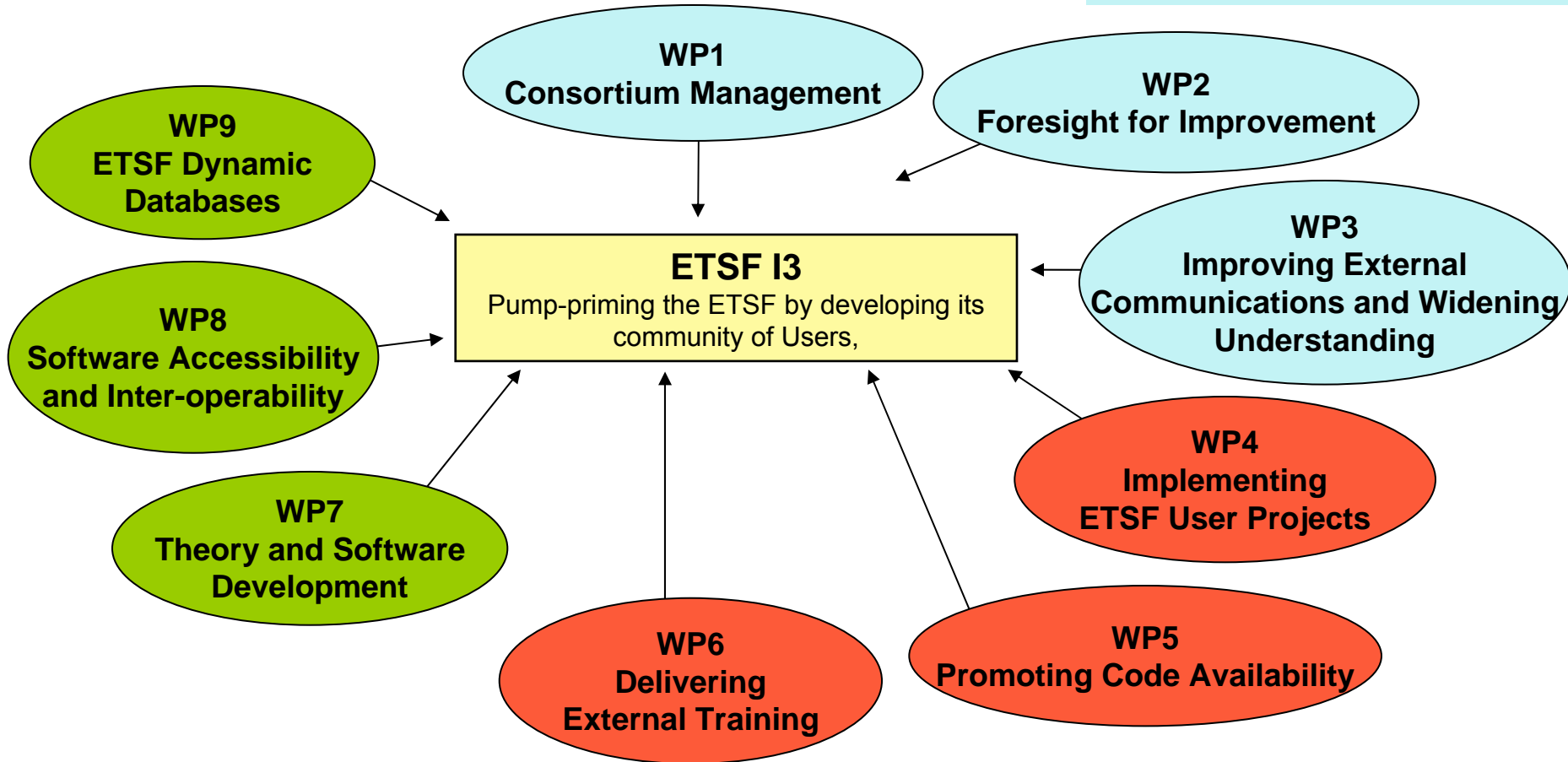
Sous-traitant: à éviter en général ...  
mais peut être accordé si les sous-traitants apportent des  
compétences complémentaires, absentes chez les partenaires  
et nécessaires à la réalisation du projet



# Activités

## Networking Activities

To foster a culture of co-operation between the participants in the project and the scientific communities benefiting from the research infrastructure.



## Service Activities

To provide trans-national access to researchers or research teams to one or more infrastructures among those operated by participants and to provide specific research infrastructures related services to the scientific community.

## Joint Research Activities

To improve, in quality and/or quantity, the services provided by the infrastructures.

## Plan de financement

| Type d'activites                      | Management<br>("limité" a 7%) | Coordination        | Other               | RTD                 |
|---------------------------------------|-------------------------------|---------------------|---------------------|---------------------|
| Work packages                         | WP1<br>networking             | WP2,3<br>Networking | WP4,5,6<br>services | WP7,8,9<br>research |
| Remboursement                         | 100%                          | 100%                | 100%                | 75%                 |
| overheads                             | 60%                           | 7%                  | 60%                 | 60%                 |
| Budget total<br>(overheads<br>inclus) | 258 k€                        | 594 k€              | 2010 k€             | 1513 k€             |

Deux "gros" work package: WP4 (implementation of user projects)  
WP7 (Theory and code development)