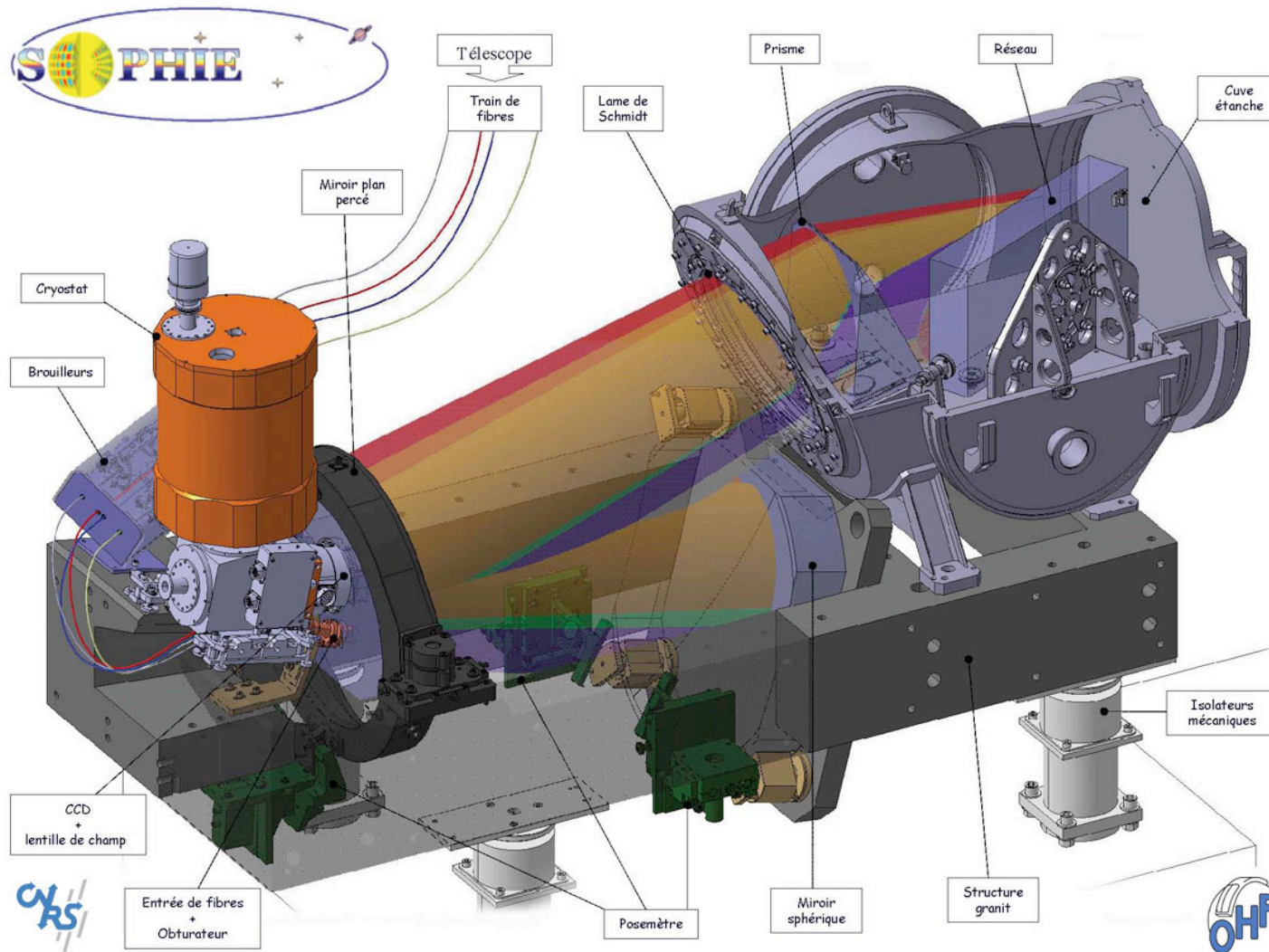


Histoire de SOPHIE

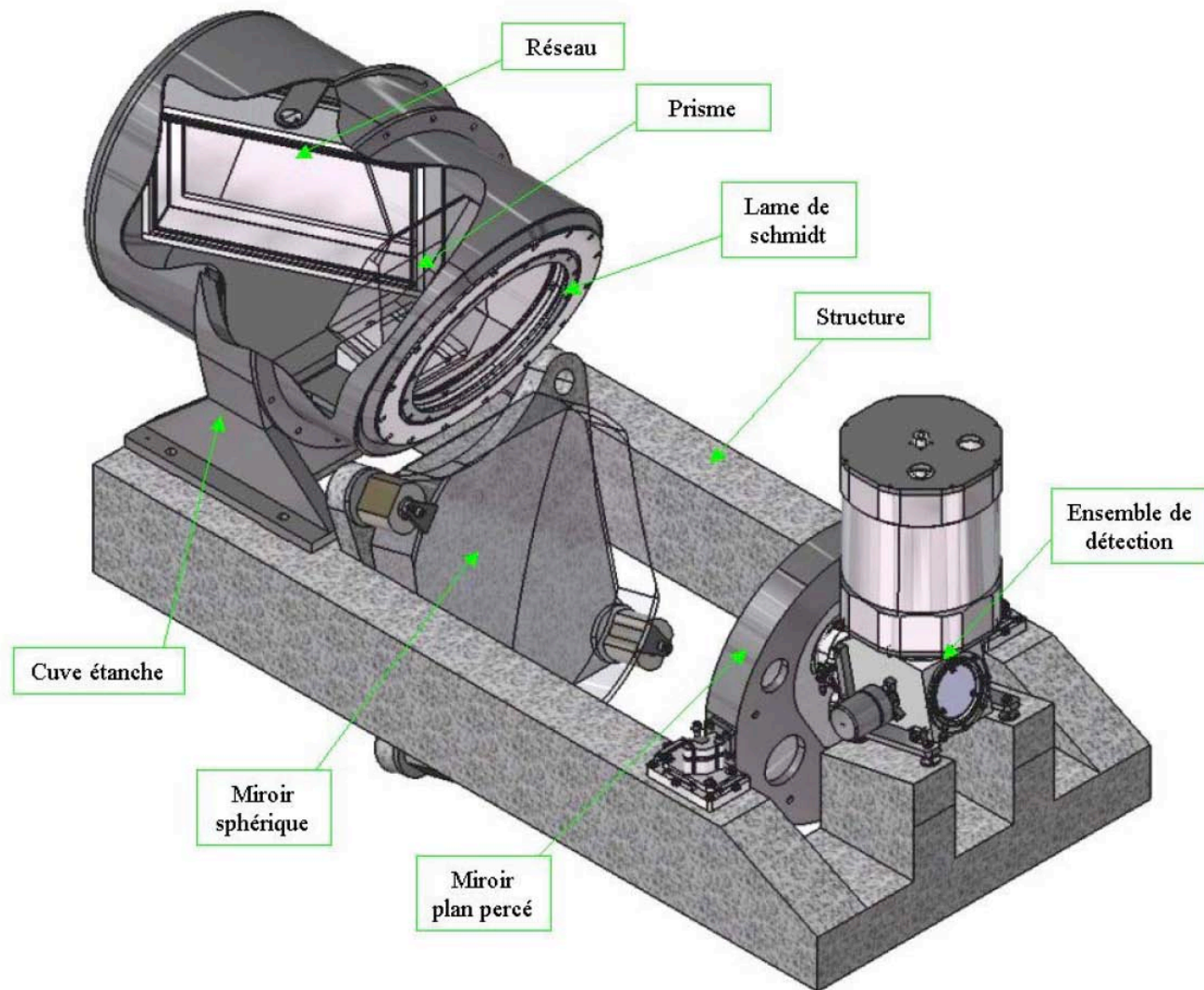
2005-2006

**Voici quelques étapes
dans la construction et
l'installation du
spectrographe SOPHIE**

Schéma de SOPHIE



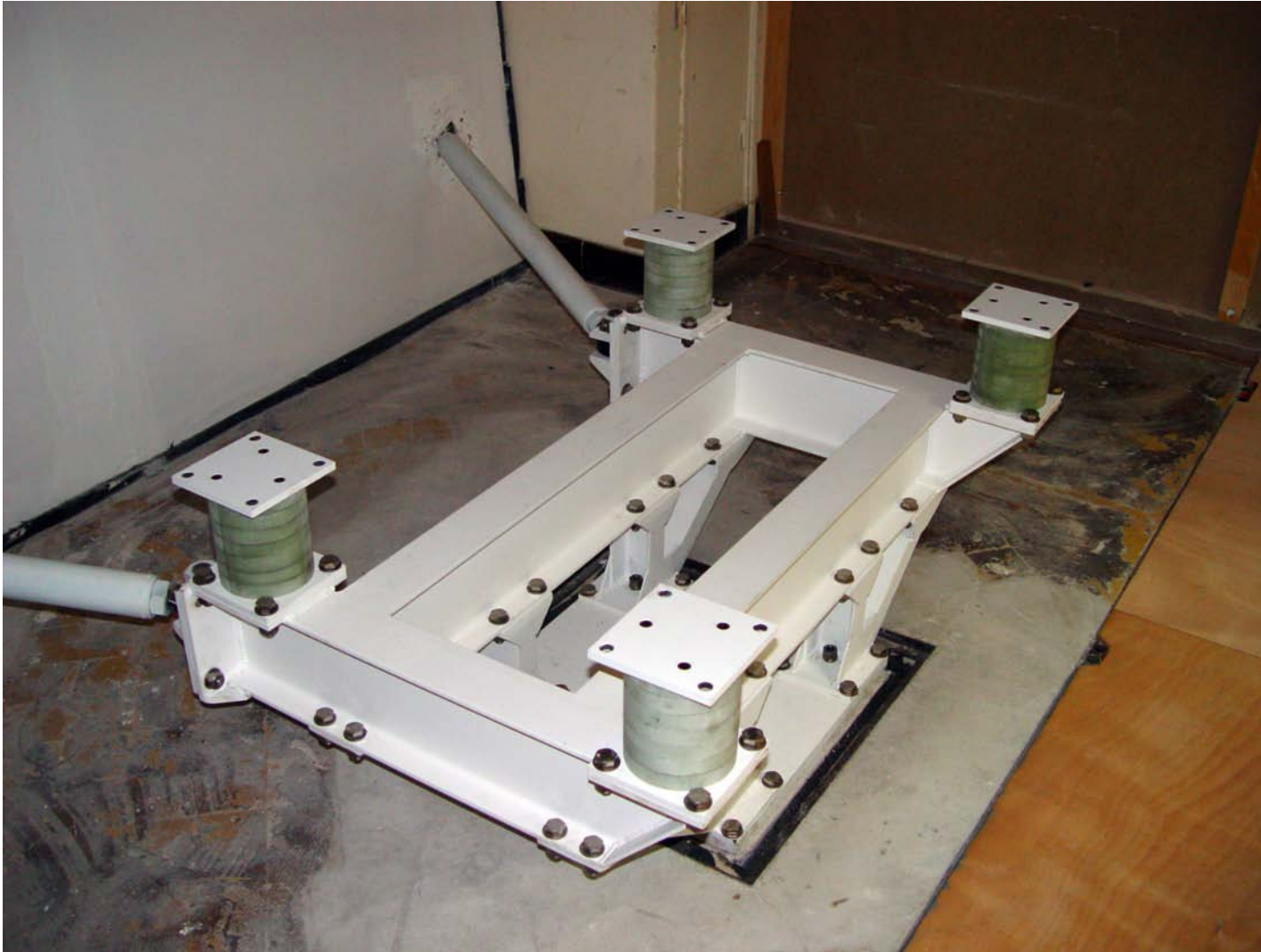
Les éléments de base



La structure en granit



Le support



Le caisson isotherme



Arrivée du granit



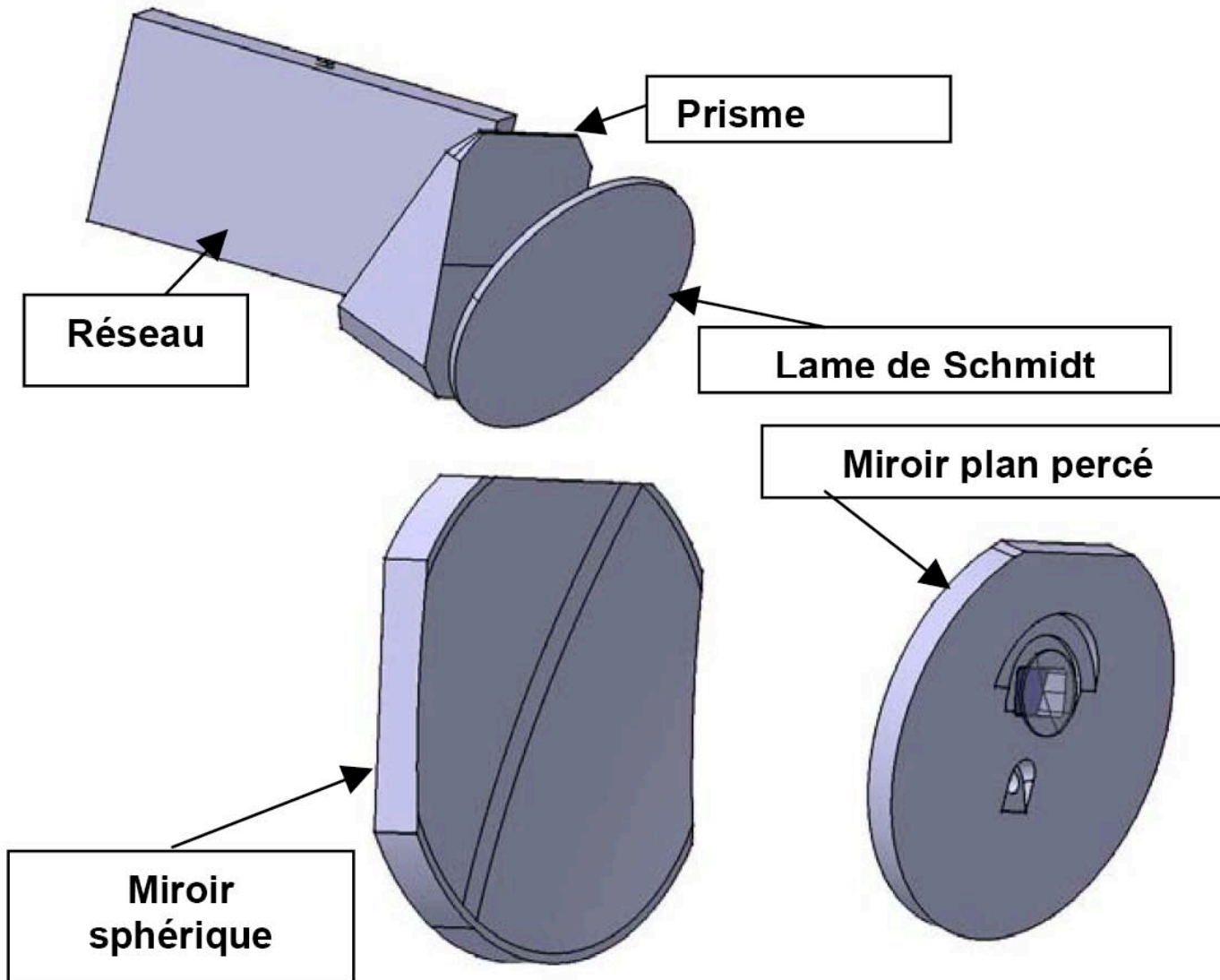
Le granit en place...



La tente pour l'intégration



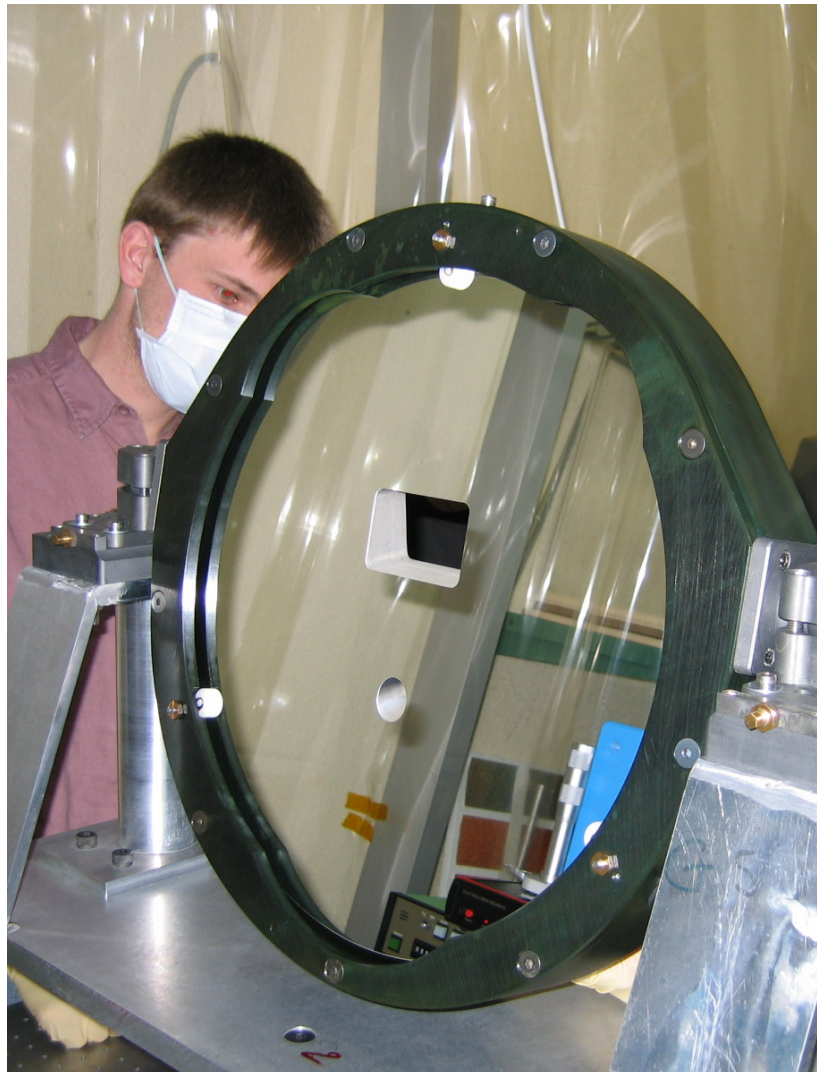
Les éléments de l'optique



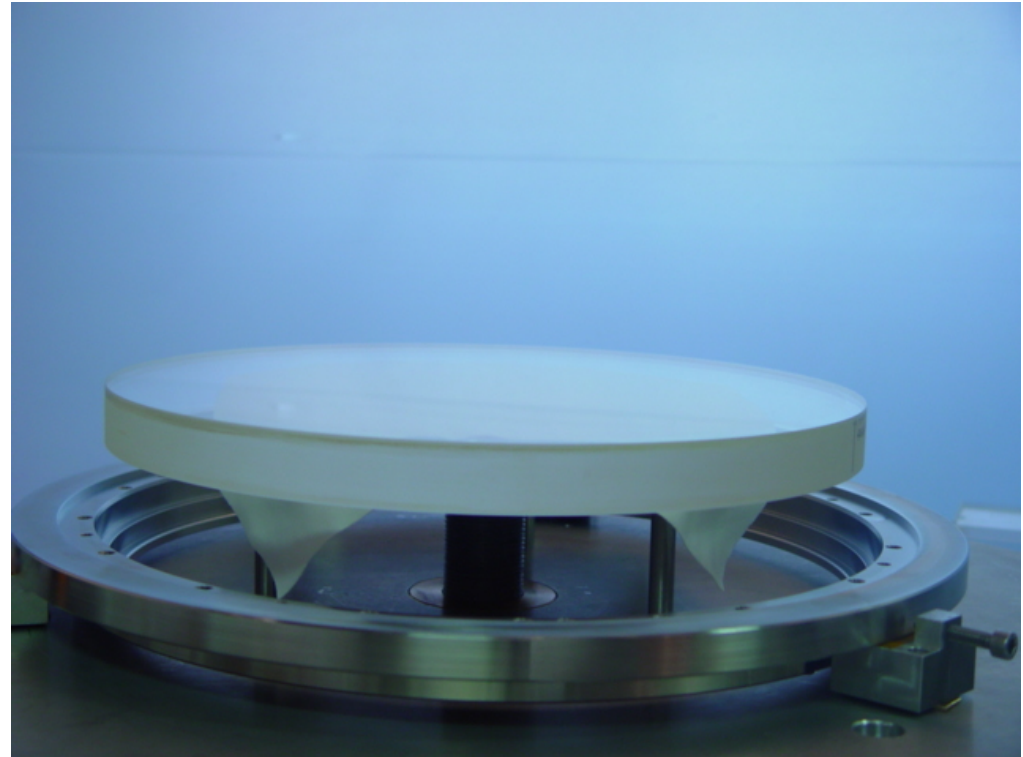
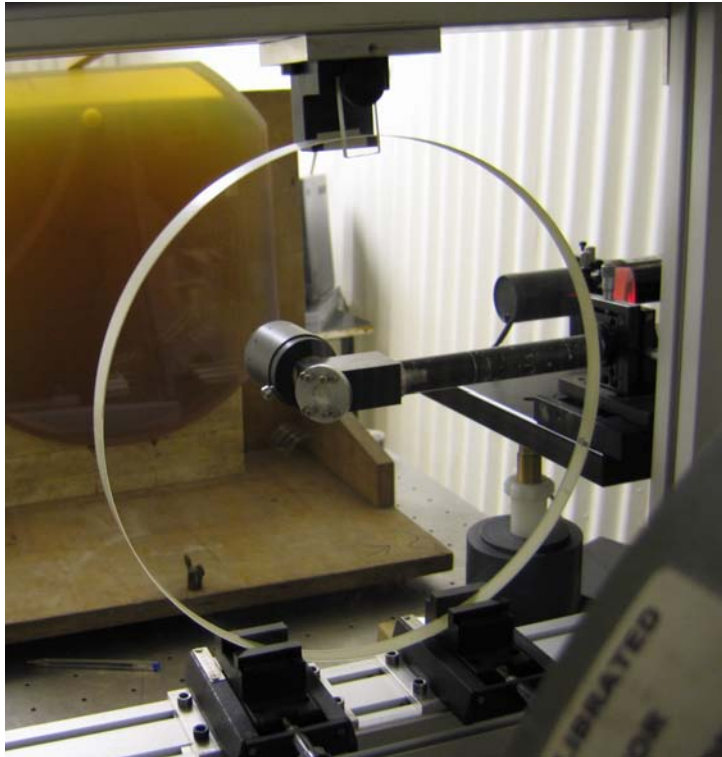
Le miroir sphérique



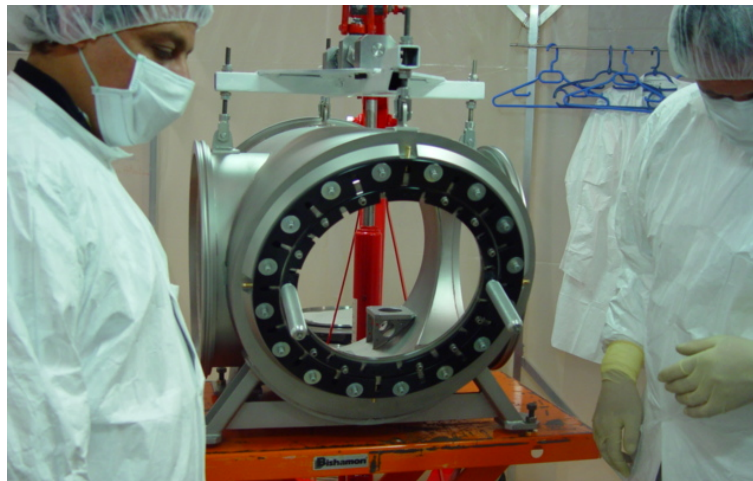
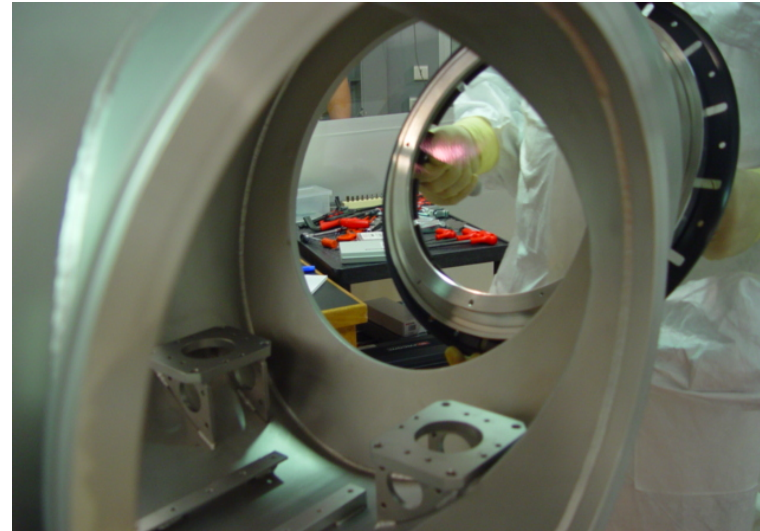
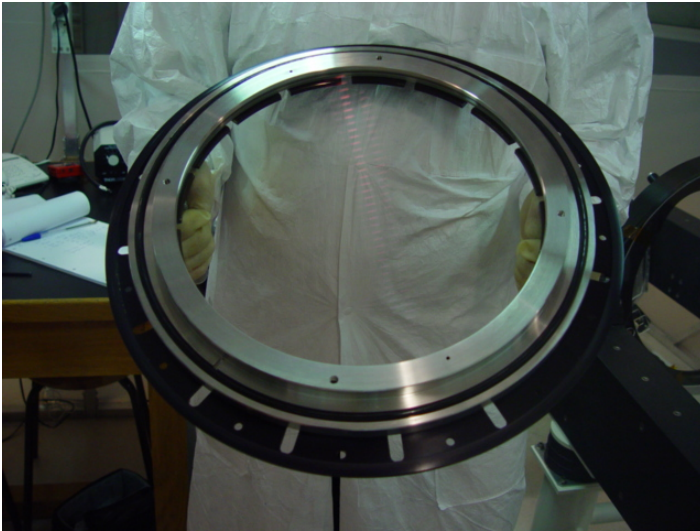
Le miroir plan percé



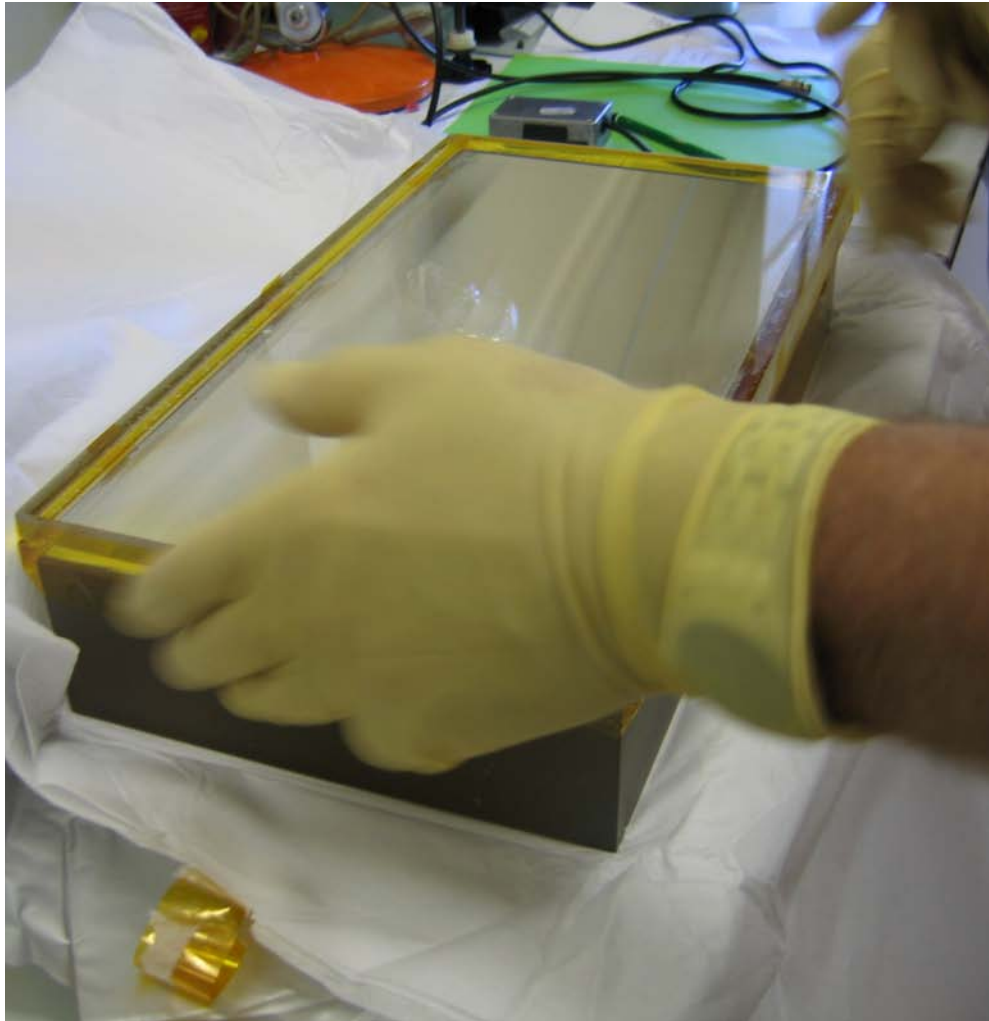
Lame de Schmidt



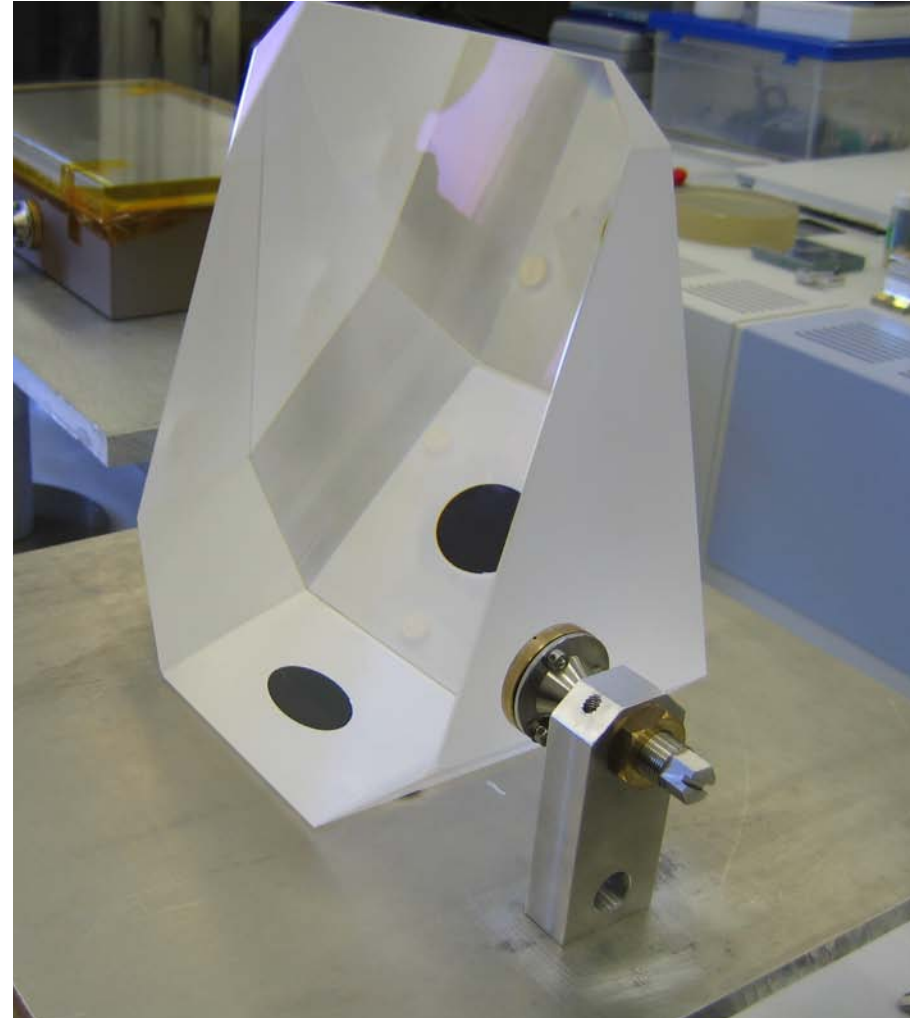
Montage de la lame



Le réseau échelle



Prisme séparateur d'ordres



La cuve étanche



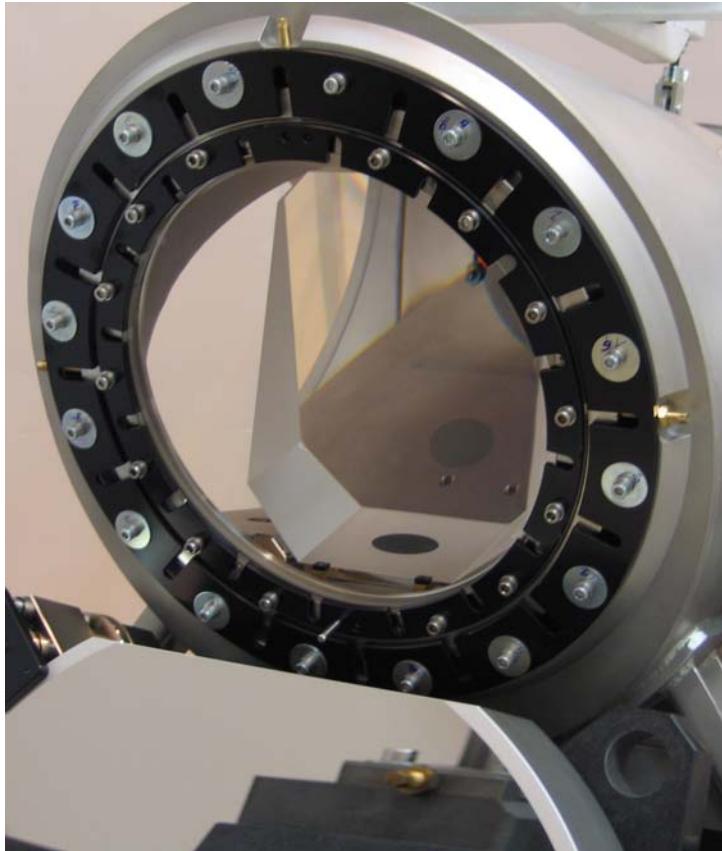
Mise en place de la cuve



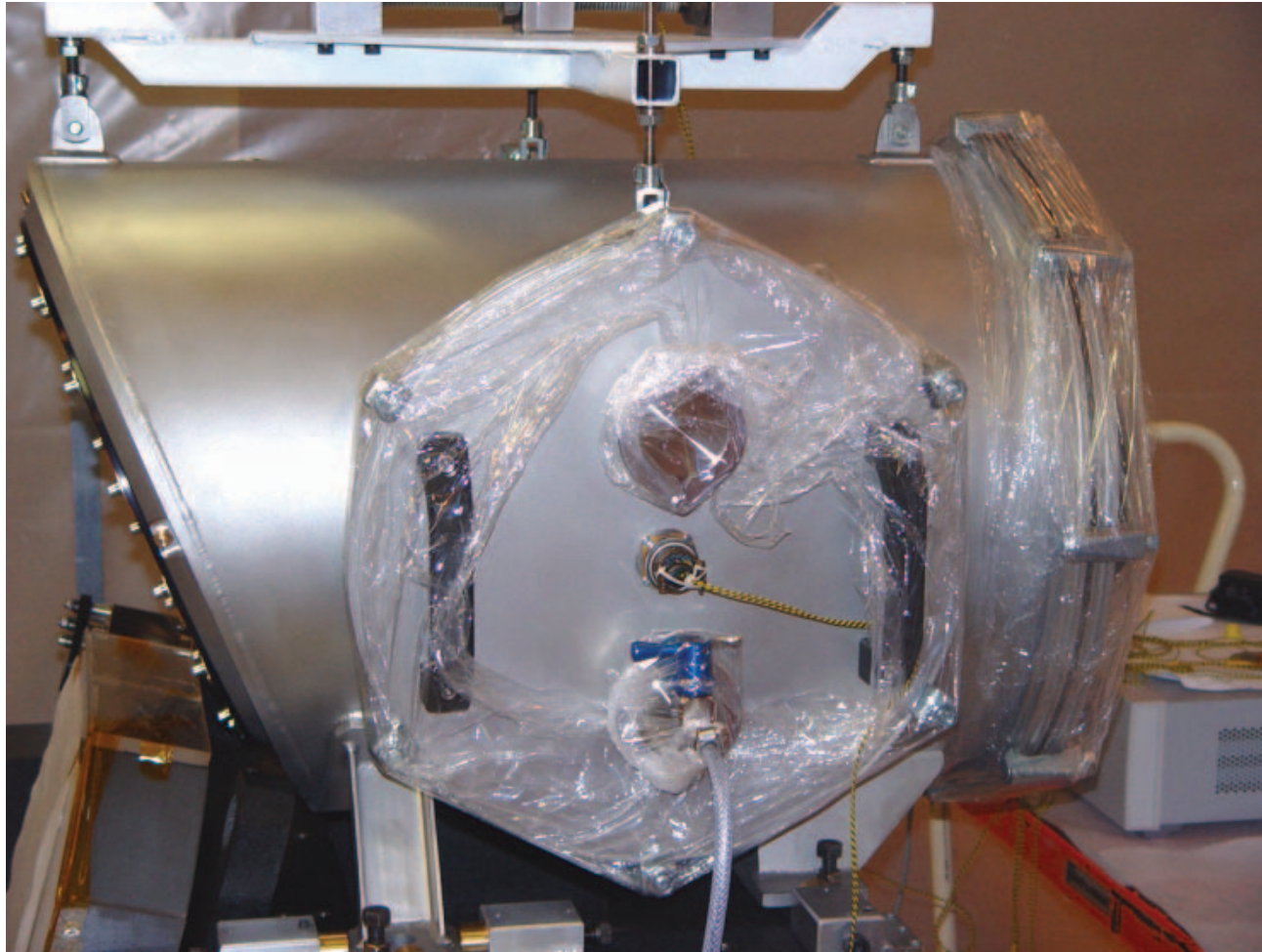
Cuve, prisme et réseau



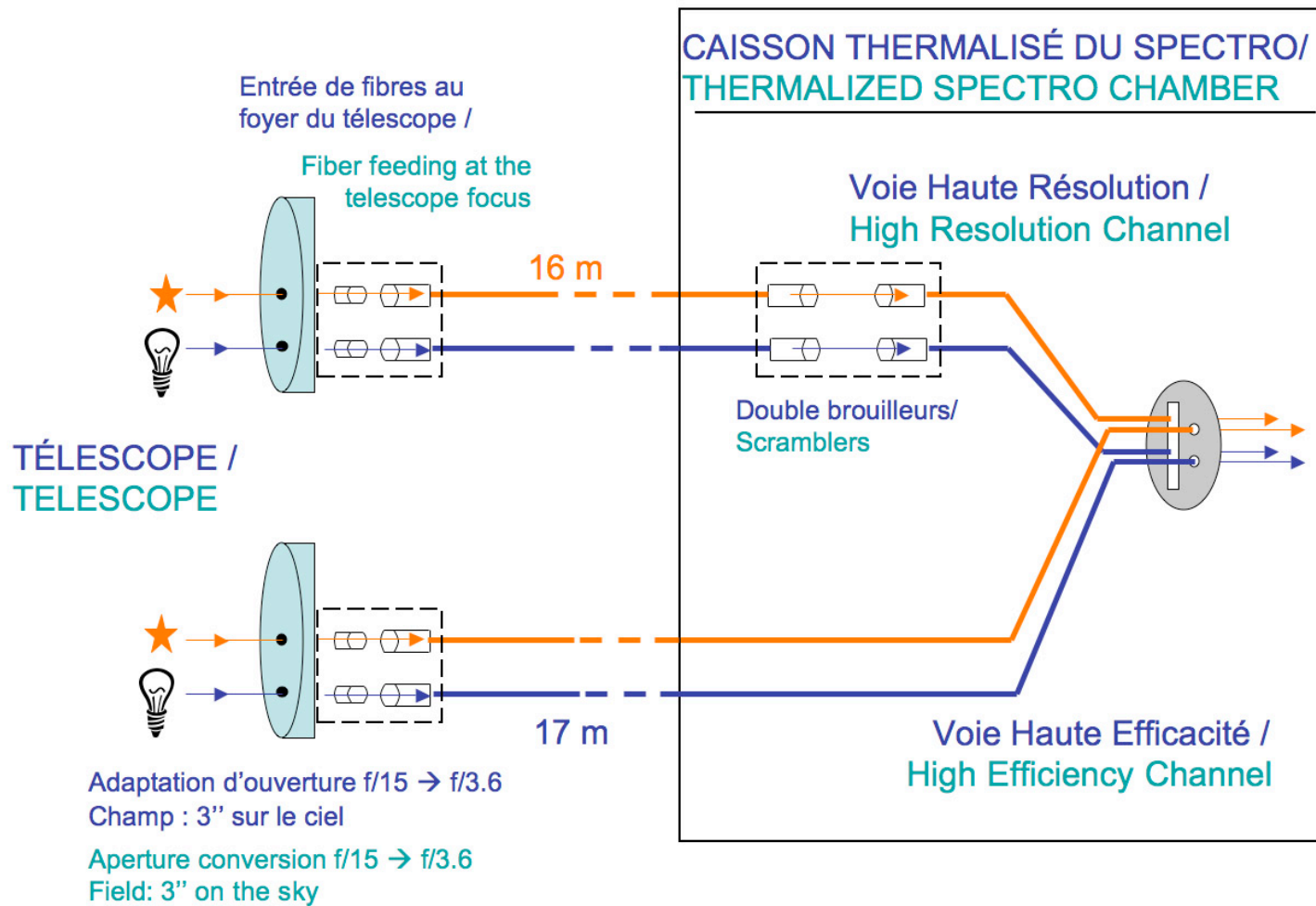
Prisme et réseau dans la cuve



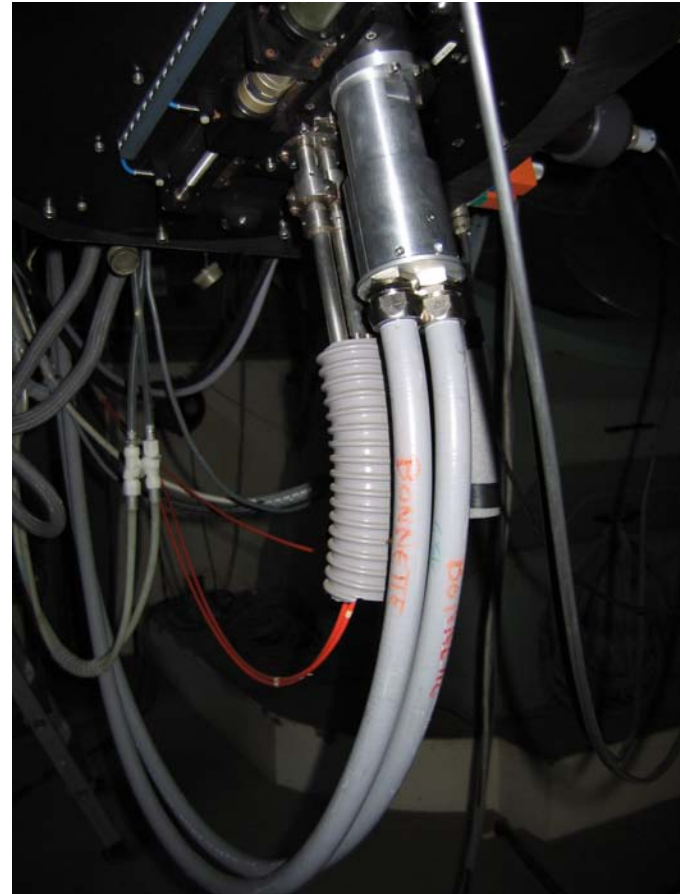
Test d'étanchéité de la cuve



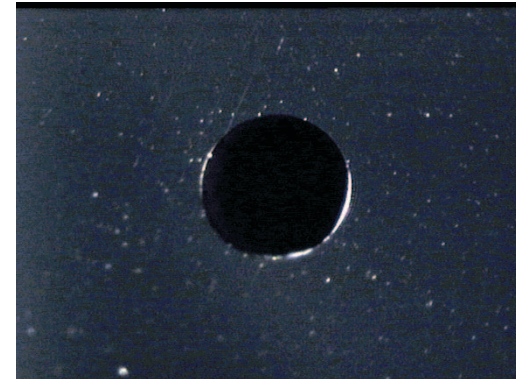
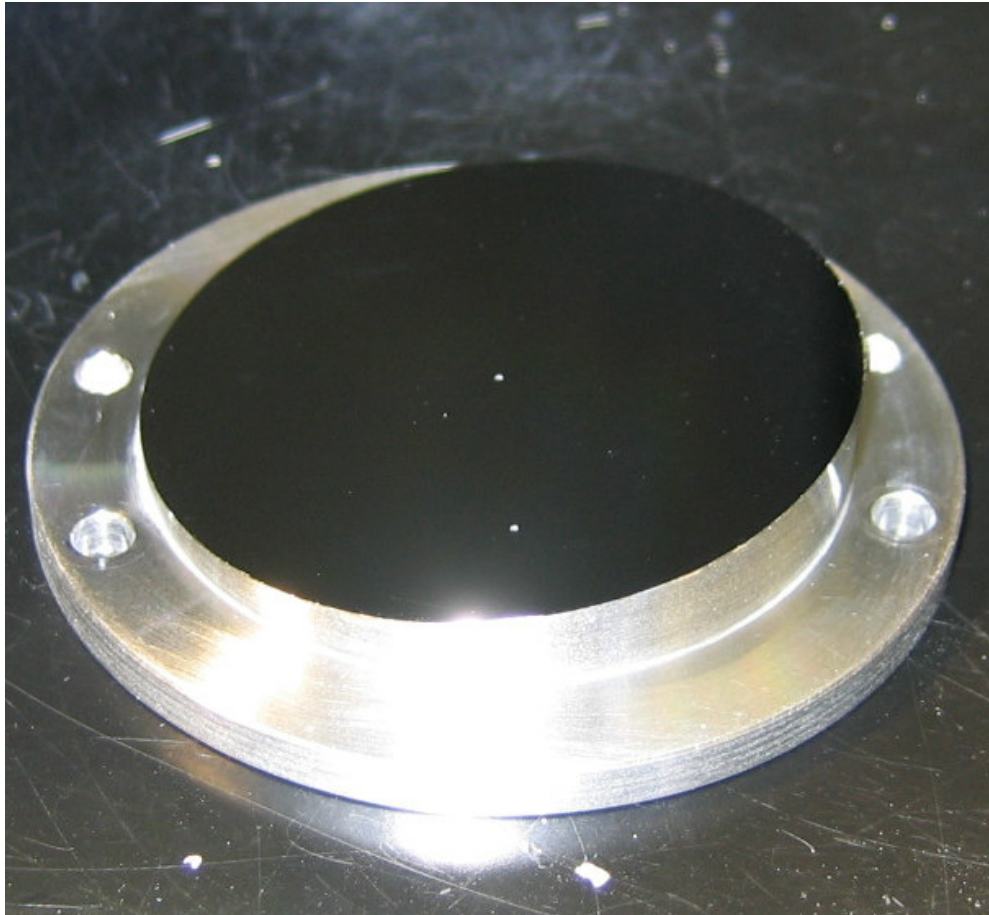
Les fibres optiques



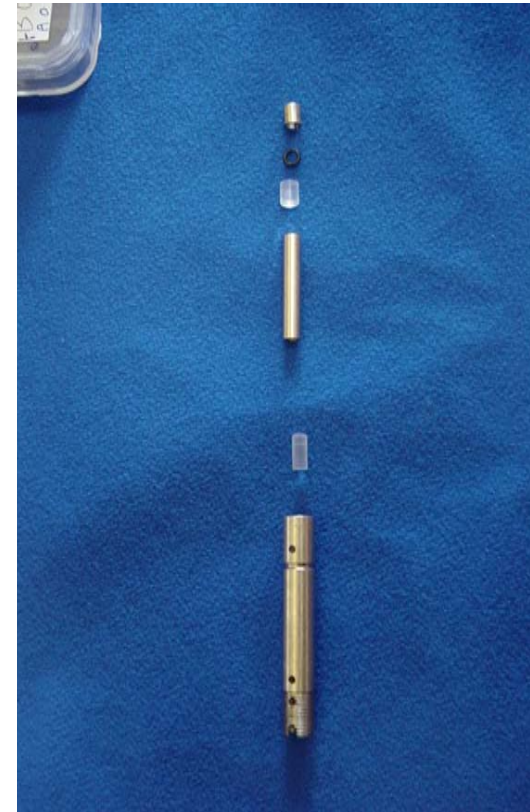
La tête de fibre (téléscope)



Tête : Miroir de visée percé



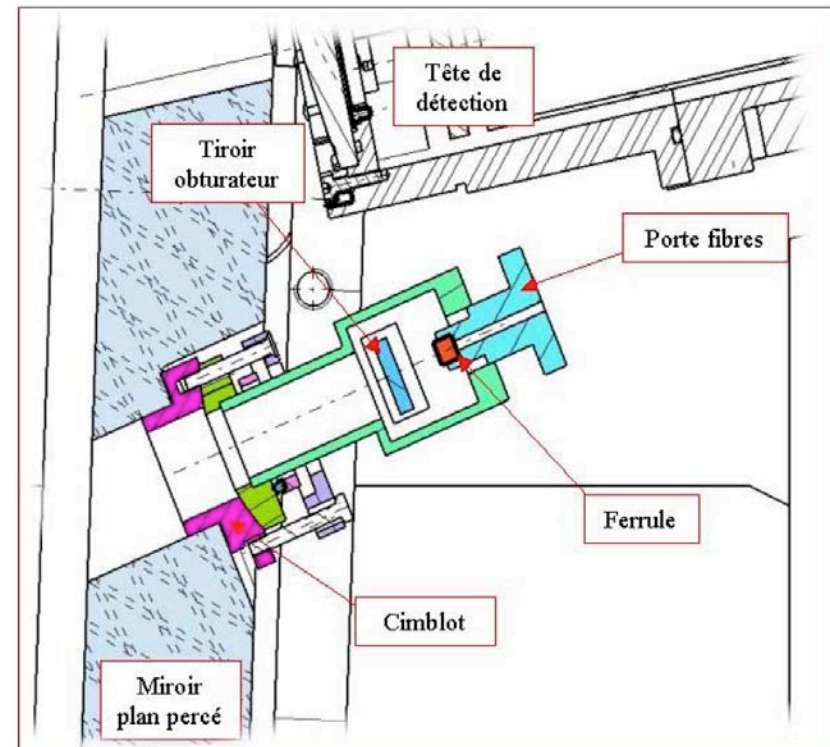
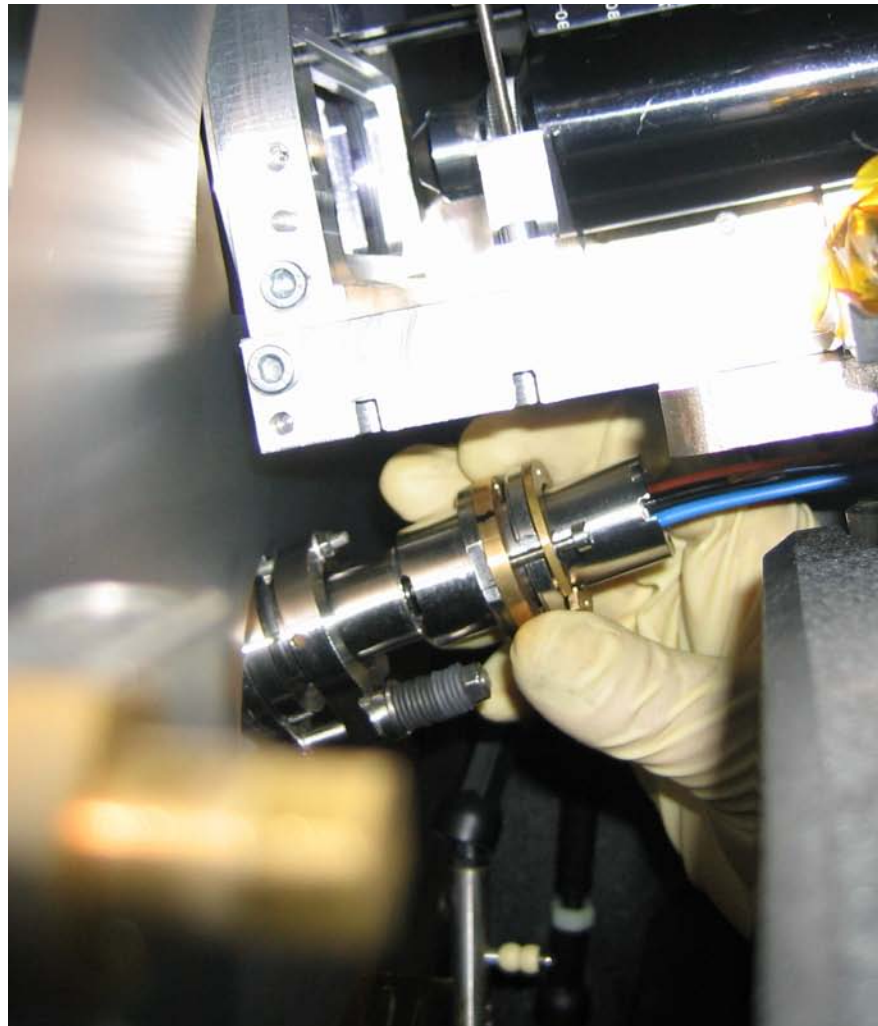
Tête : Montage des doublets



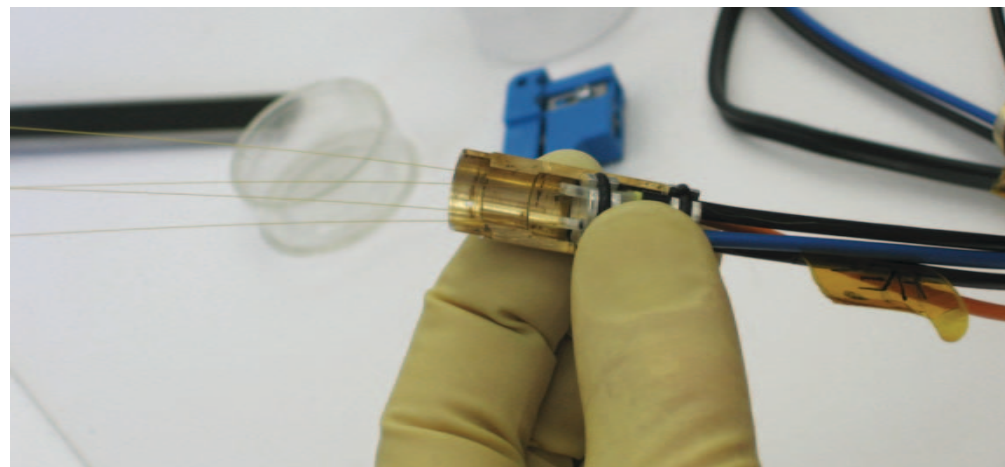
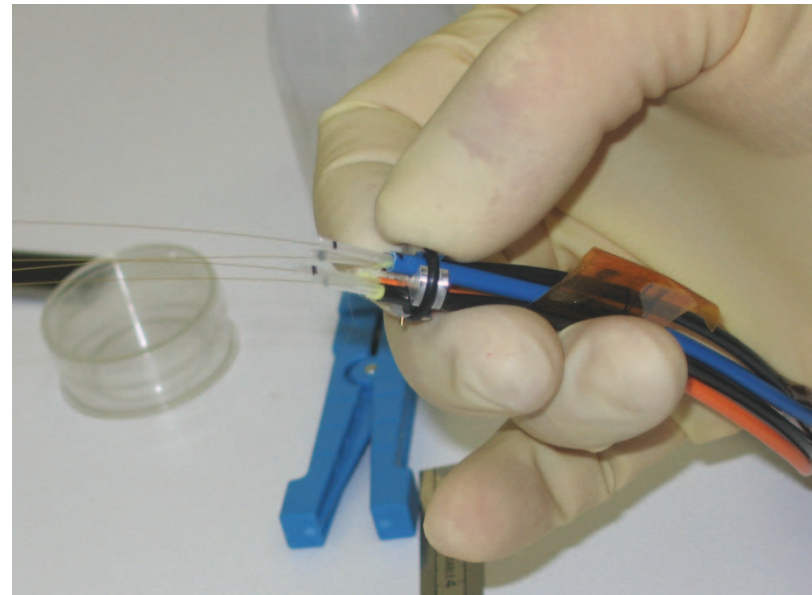
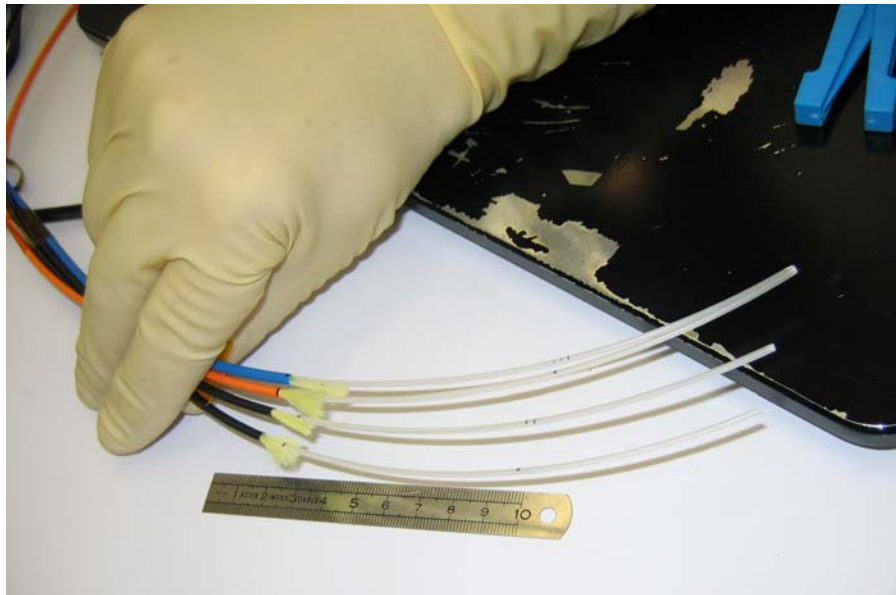
Tête : Collage des fibres



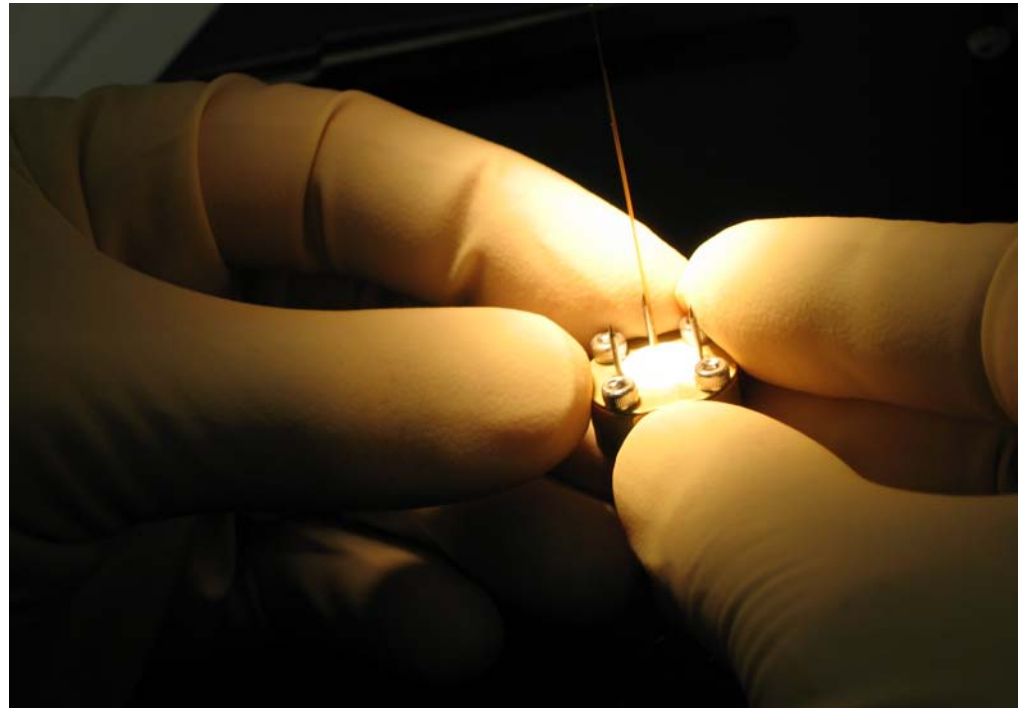
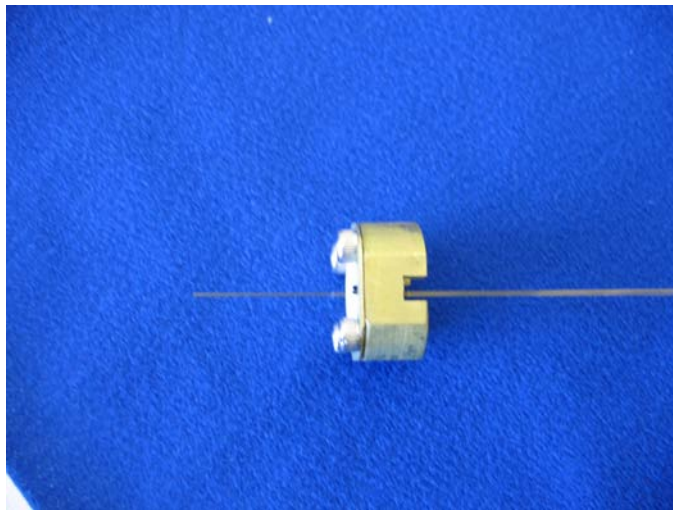
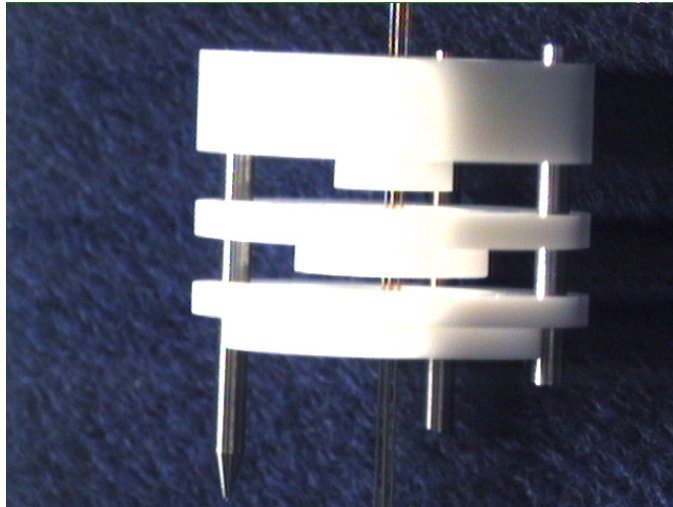
Entrée de fibres dans spectro



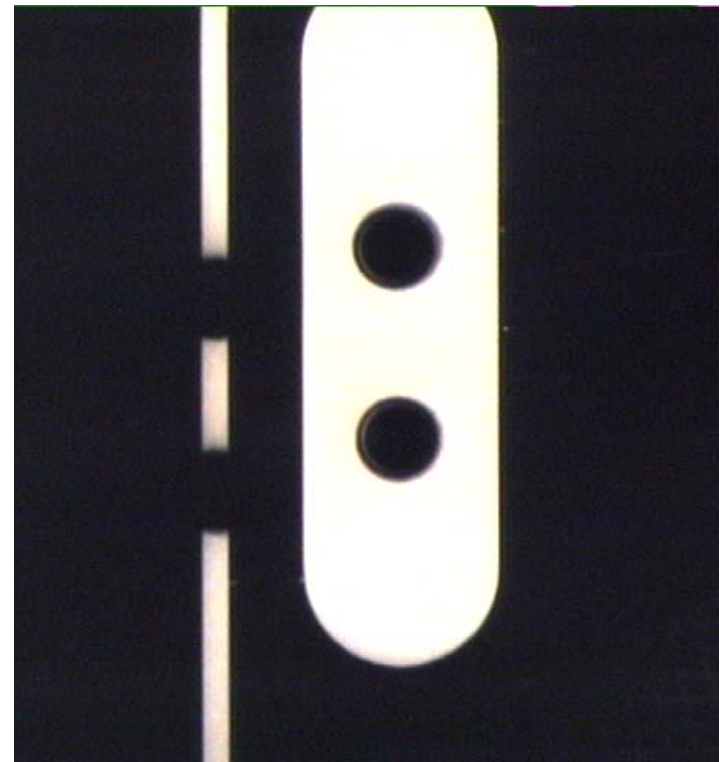
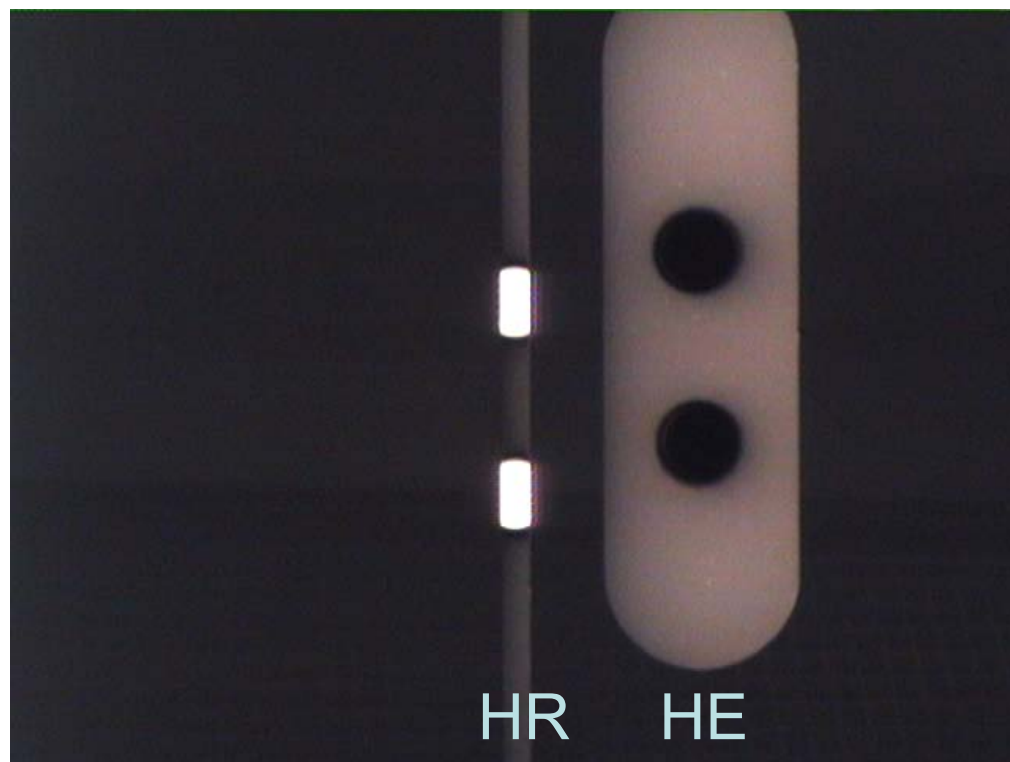
Préparation des fibres



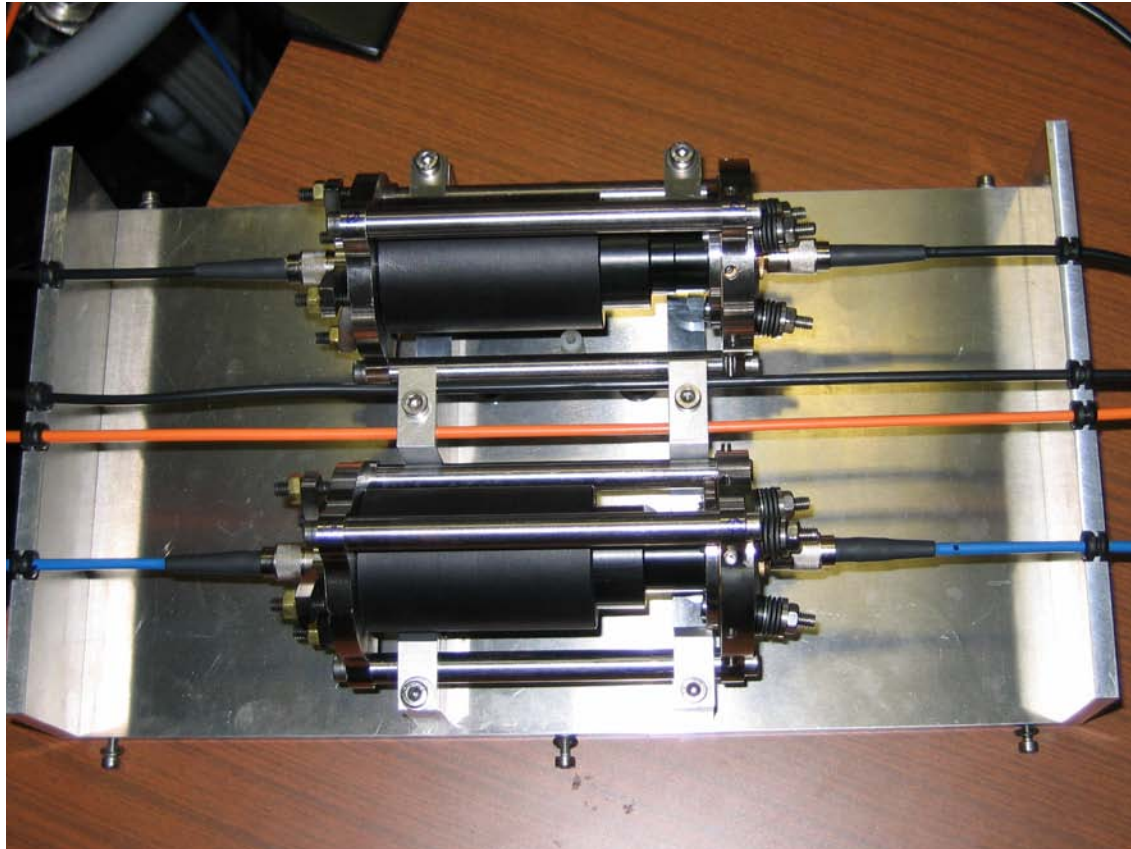
Férule: connexion fibres-spectro



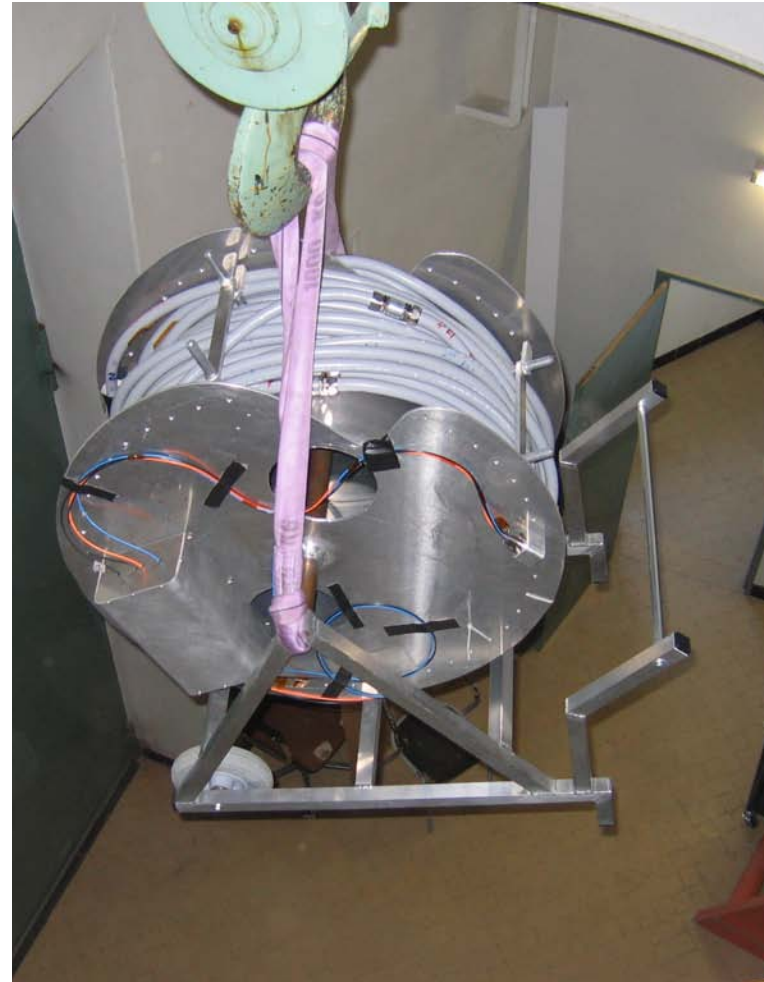
Entre fibre et spectro: les fentes (modes HR et HE)



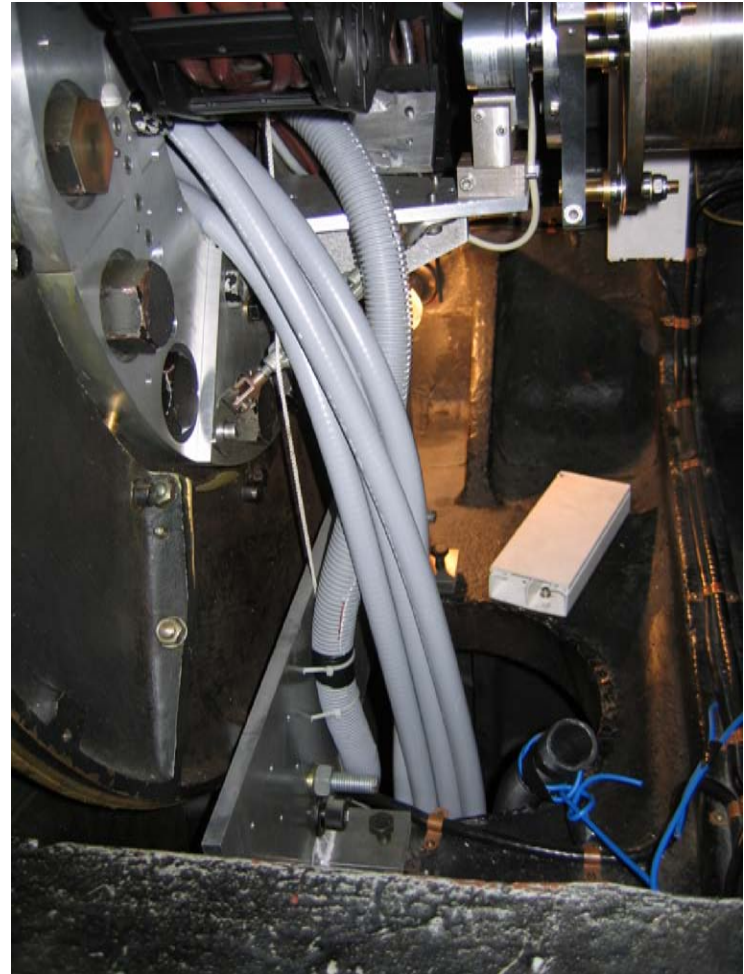
Mode HR : les brouilleurs



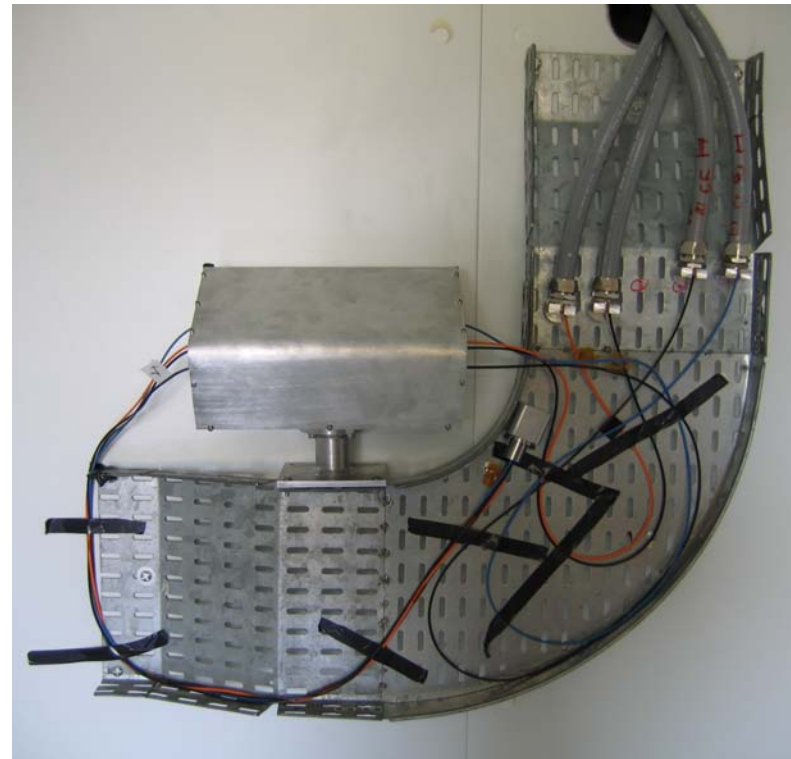
Gainage du train de fibres



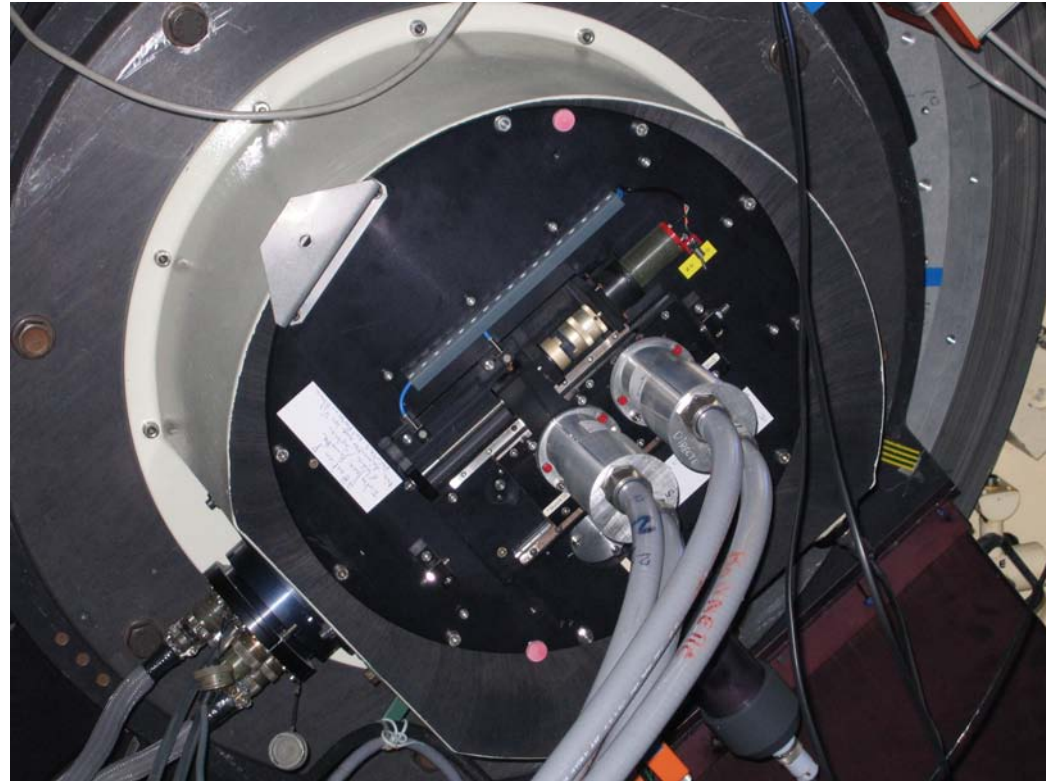
Passage des fibres (télescope)



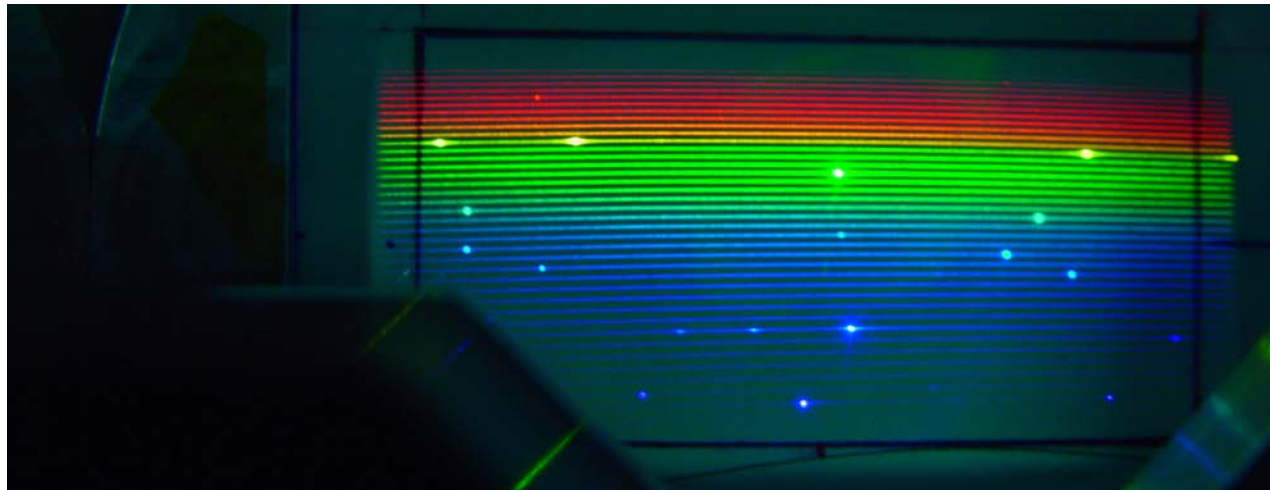
Arrivée des fibres au coudé



La bonette

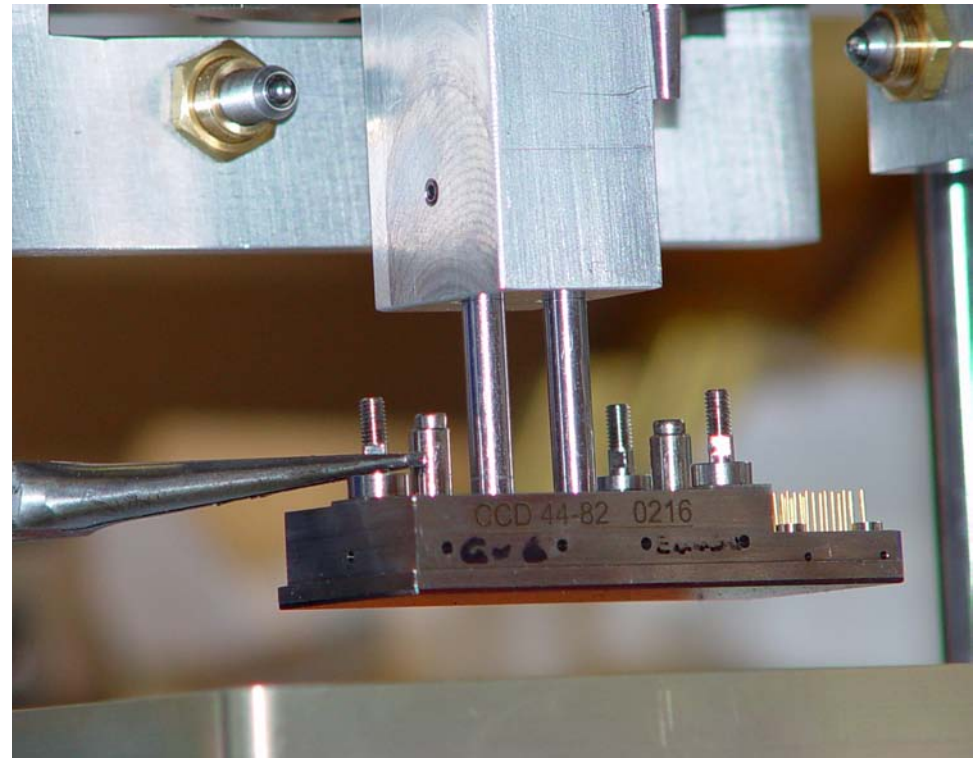
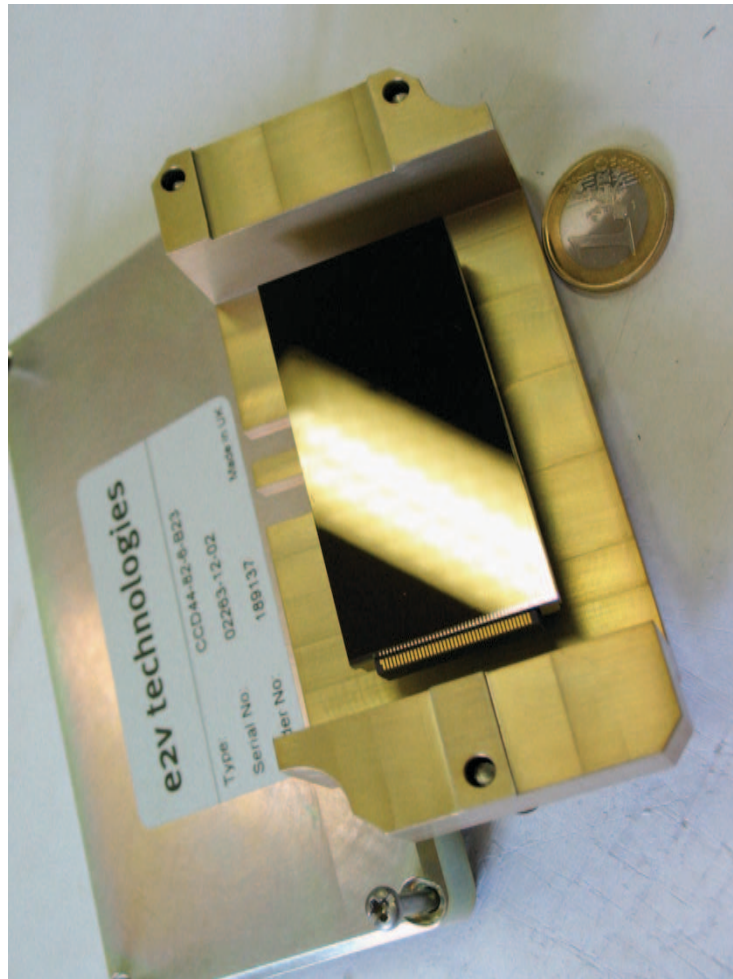


Pour enregistrer le spectre le plus fidèlement possible:

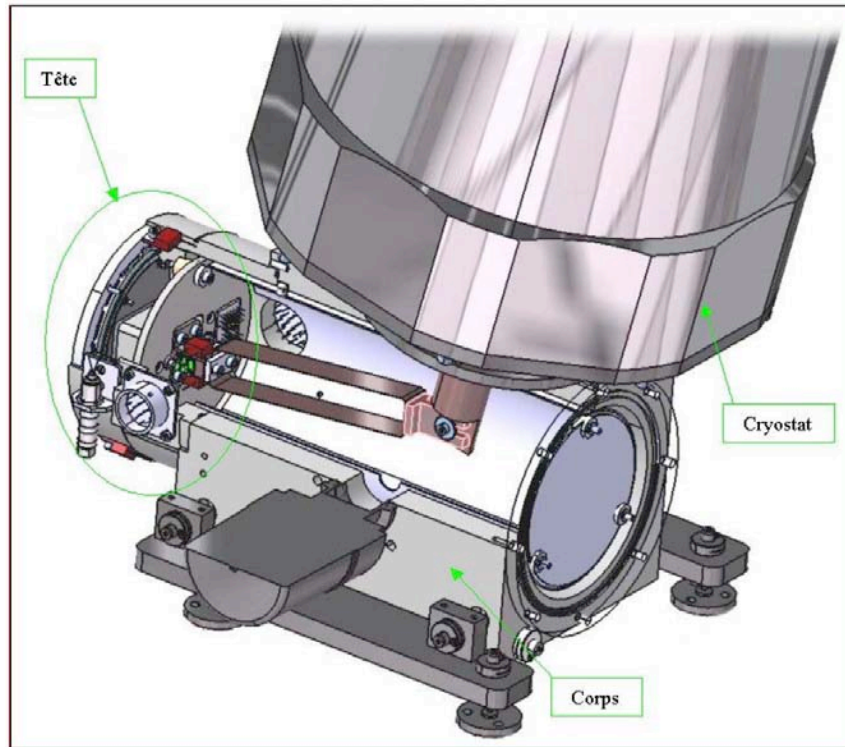


Le détecteur CCD

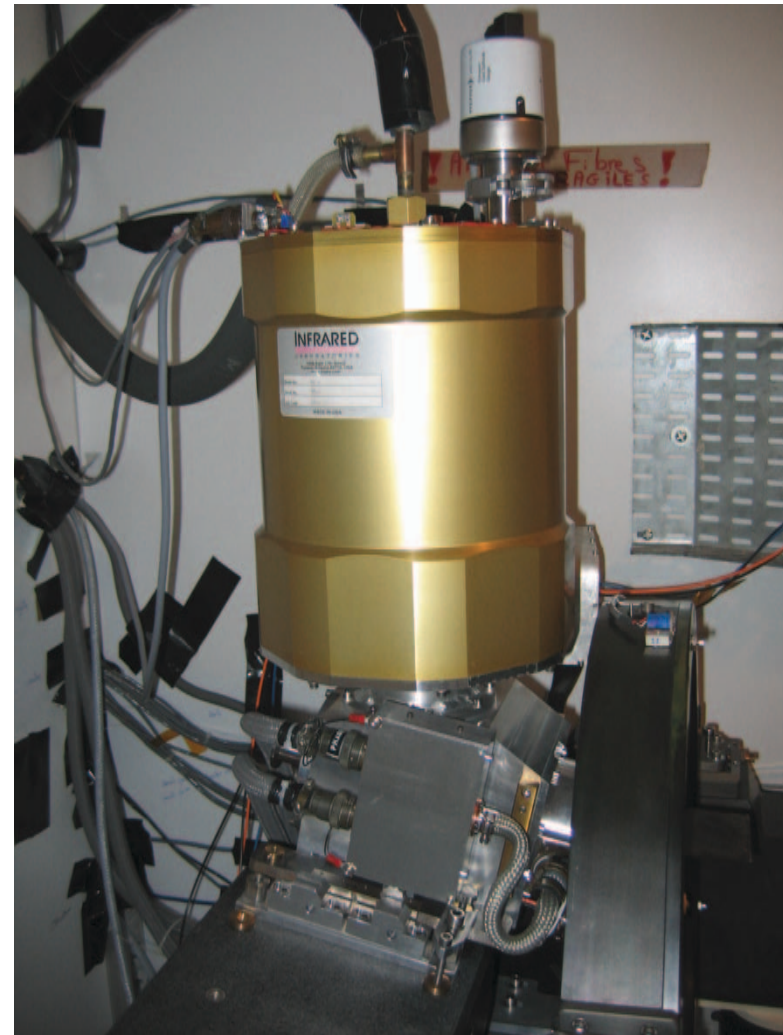
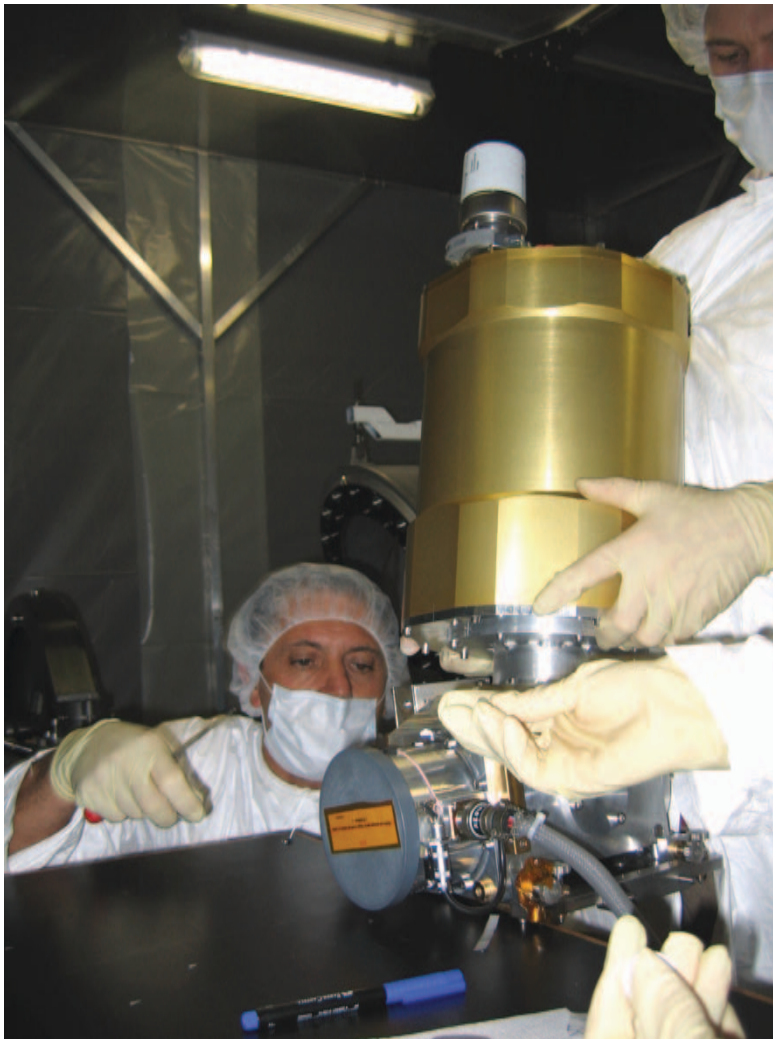
La matrice CCD 4096 × 2048



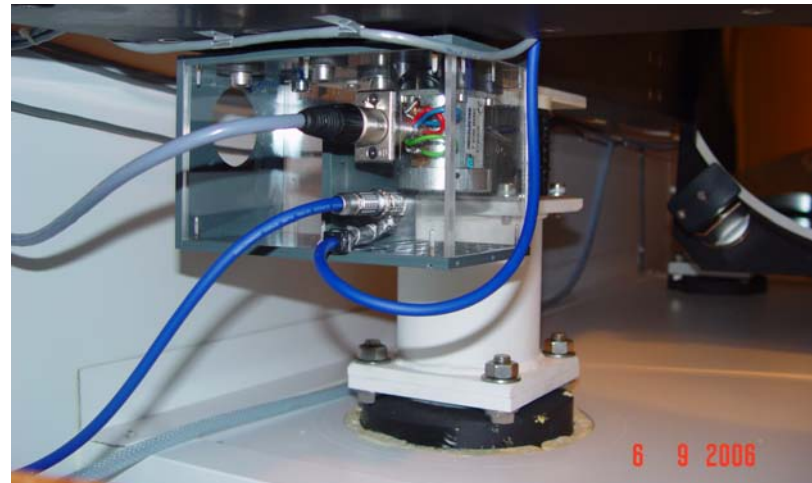
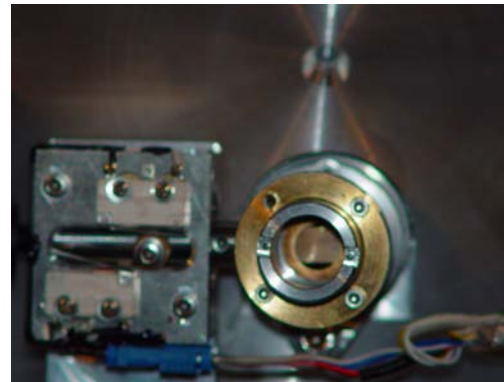
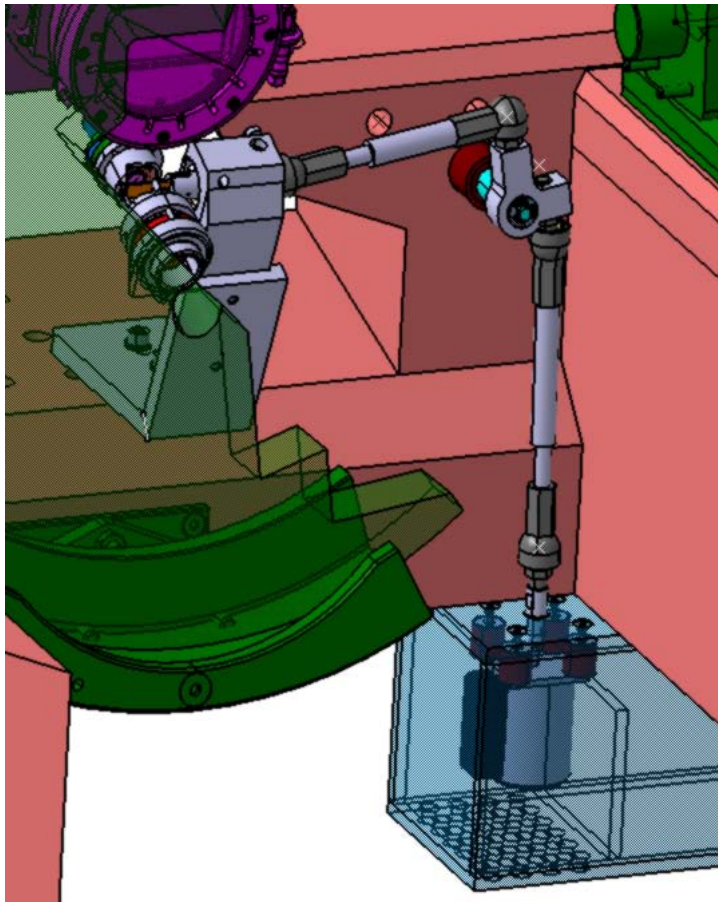
Le cryostat avec le CCD



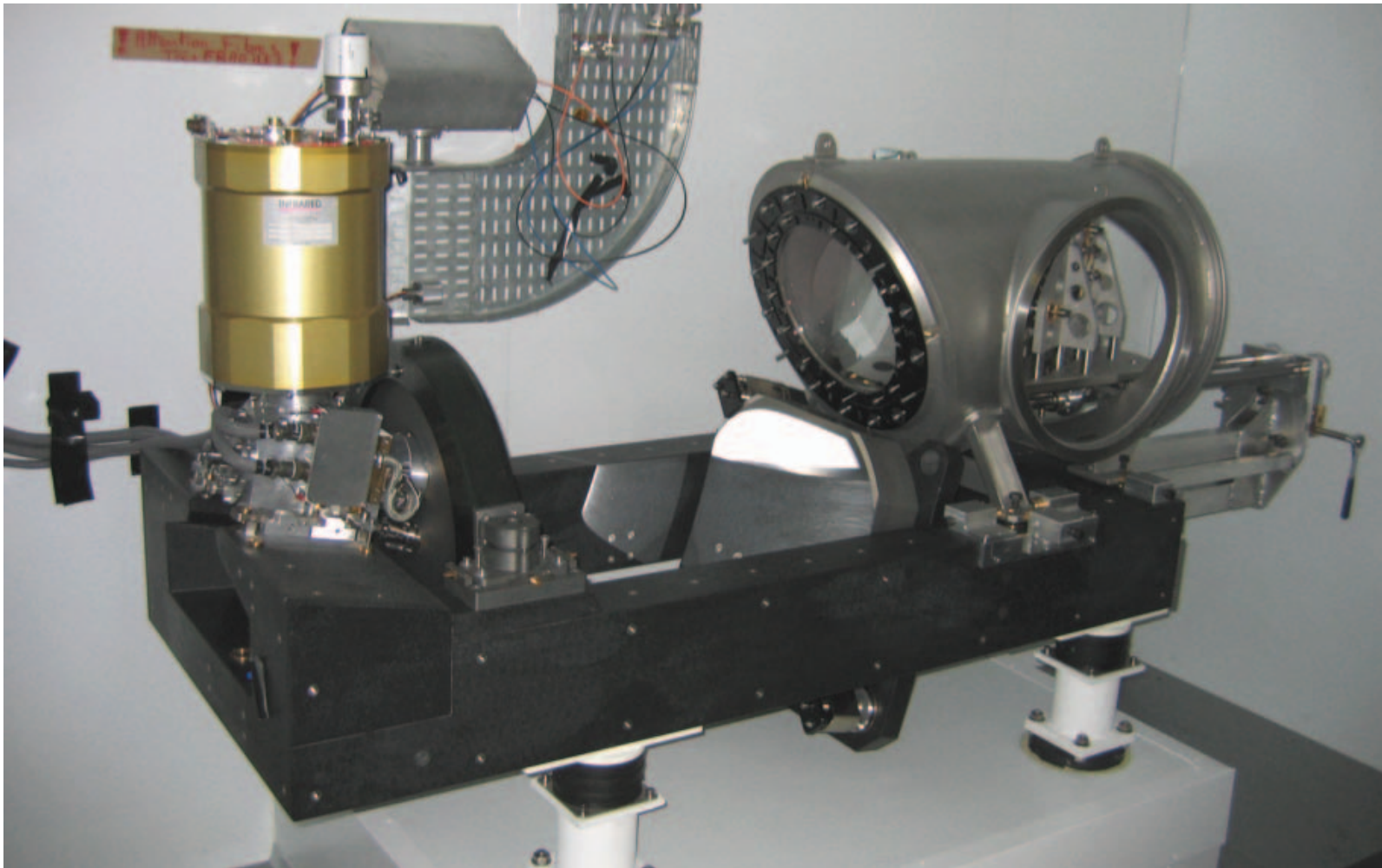
Mise en place du cryostat



L'obturateur



Le spectro est assemblé...





Presque prêt !

*Vue du spectro
SOPHIE dans le
caisson isotherme.*

*L'électronique de
pilotage et de contrôle
est dans les baies à
gauche.*

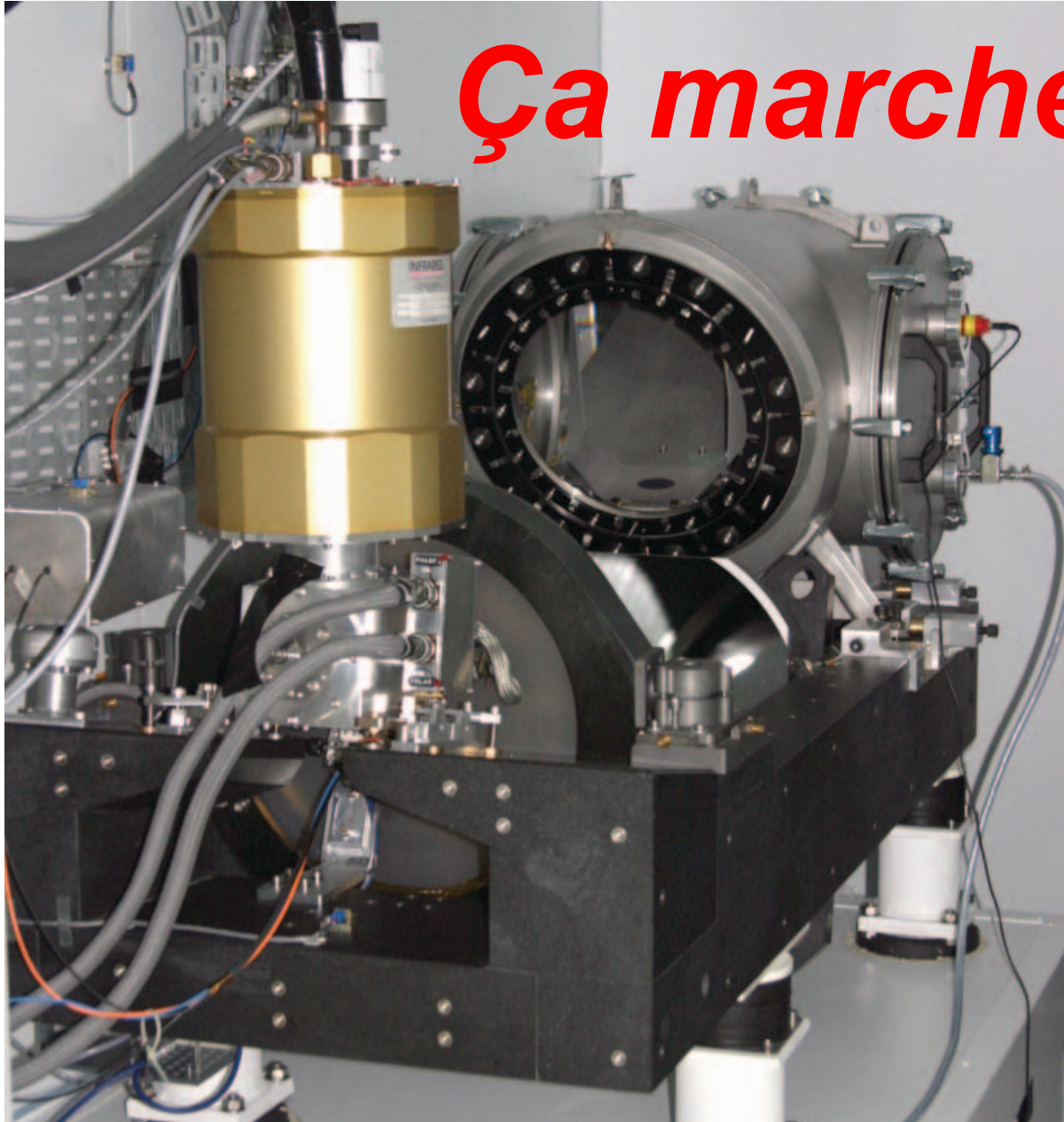
Commande et traitement



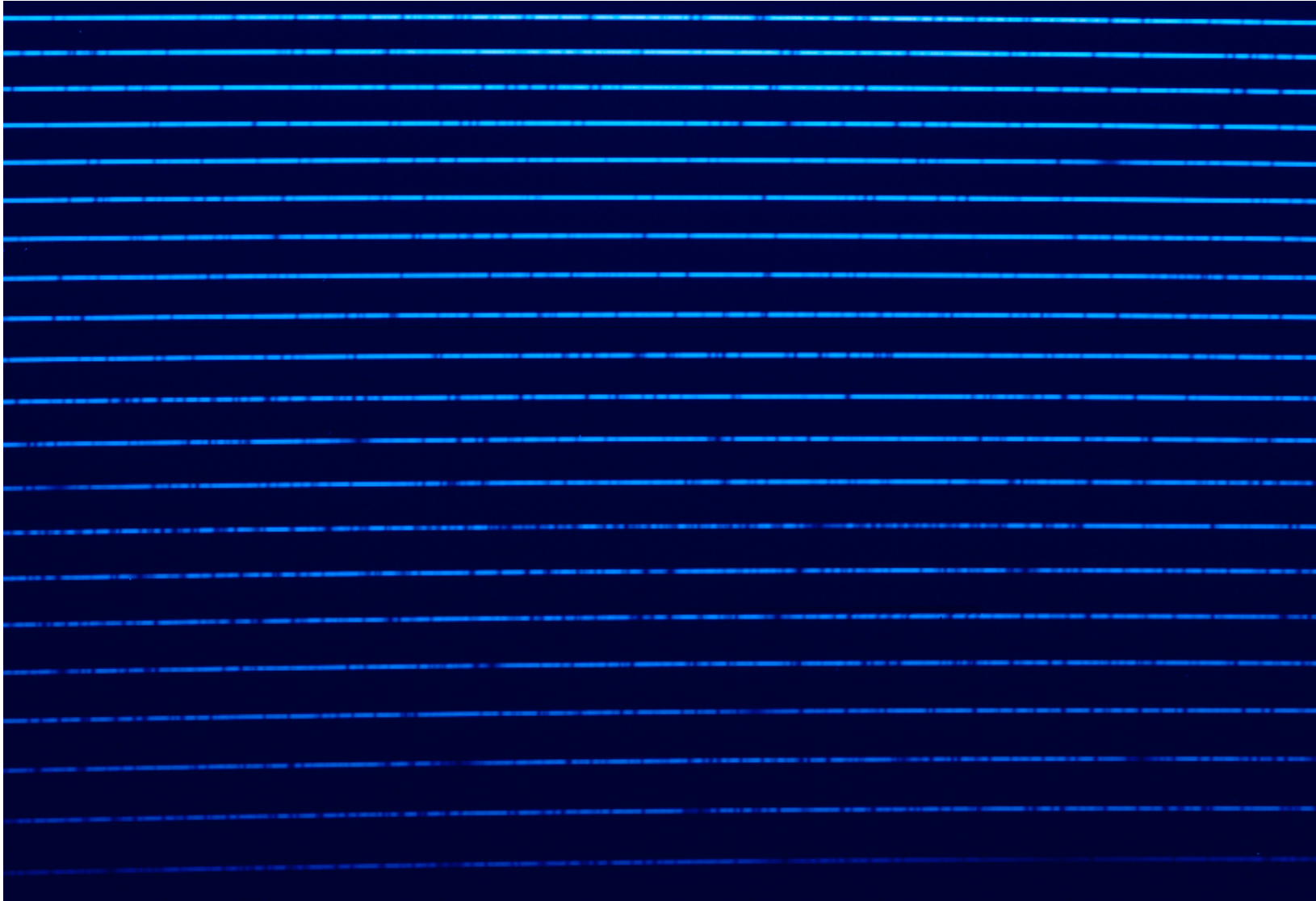
Contrôle des températures et pressions



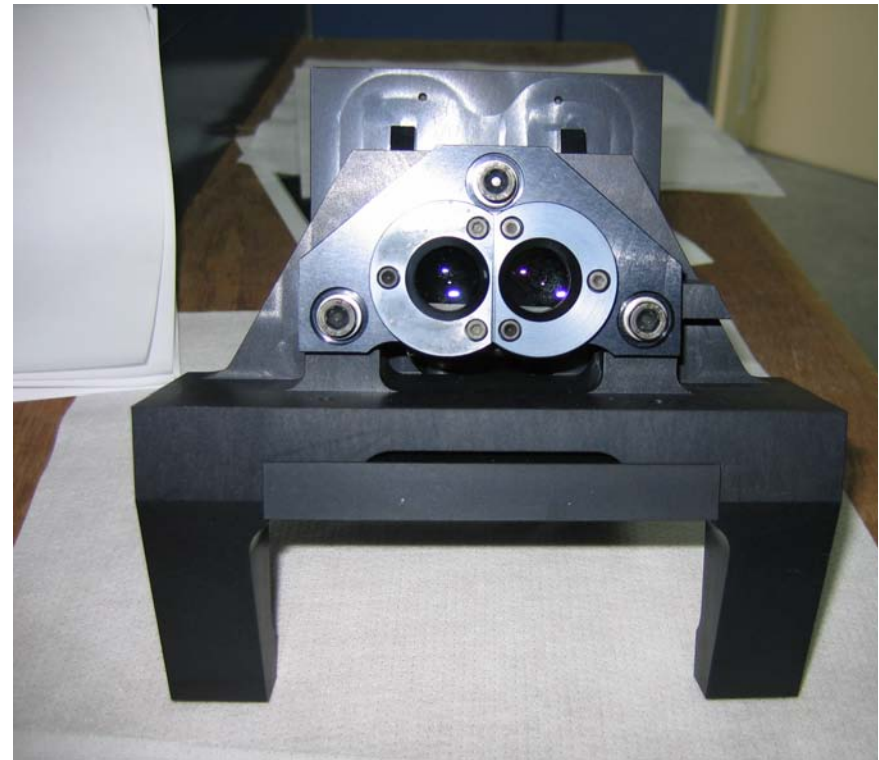
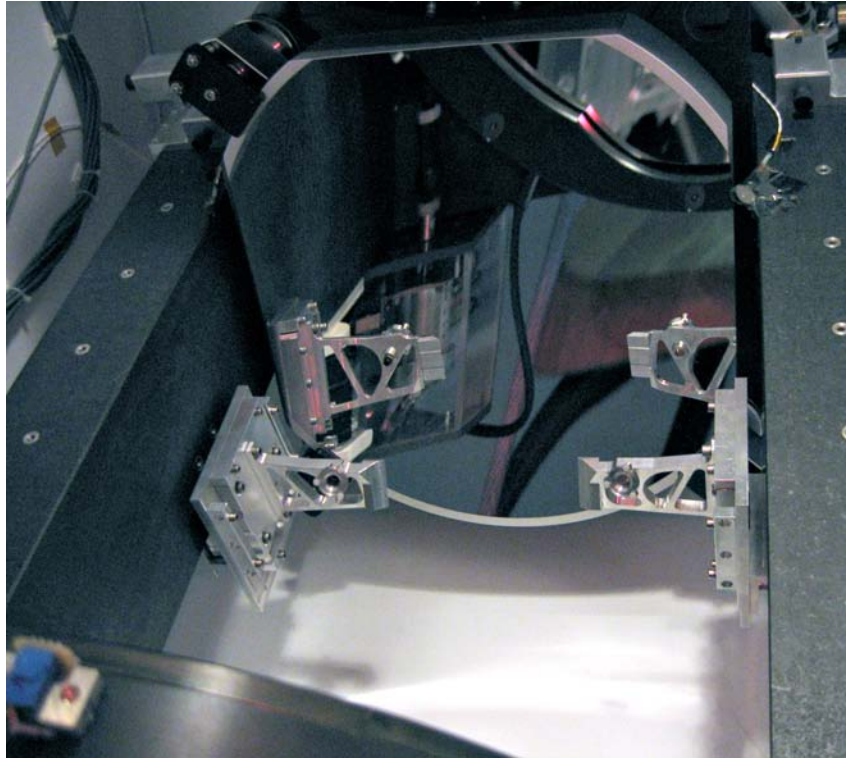
Ça marche !



Partie d'un spectre de 51Peg



A venir: le posemètre



Quelques images de la métamorphose de la salle d'observation

La salle avant travaux



Pendant les travaux....



... les observations ont continué

