

Le métier d'astronome



Sébastien Derriere
Journée présentation début de stage



CENTRE DE DONNÉES
ASTRONOMIQUES DE STRASBOURG

□ Formation

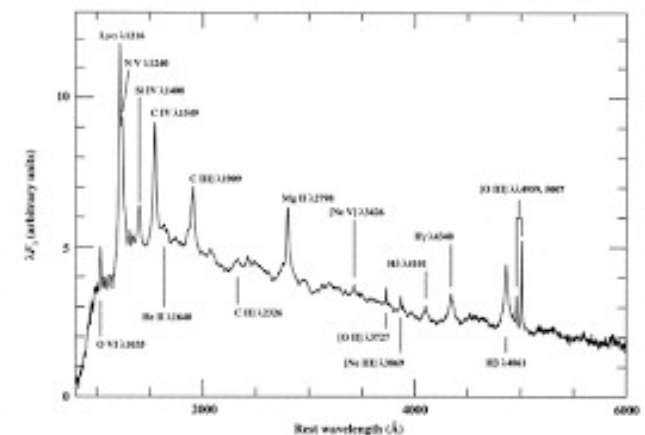
- Etudes scientifiques bac+5
 - Université Master 2
 - Ecole d'ingénieur
 - Grandes écoles
- Doctorat → bac+8
 - Travail de recherche



□ Après la thèse

- Post-doctorat
 - Spécialisation / diversification
 - Qq années de CDD
 - Souvent à l'étranger

$$G_{\mu\nu} = \frac{8\pi G}{c^4} T_{\mu\nu}$$



☐ Poste permanent

- Réussir un concours
 - (grosse pression !!)

CNRS



Université



CNAP

Conseil
National des
Astronomes et
Physiciens

- Chargé de recherche
- Directeur de recherche
- 100 % de recherche



□ Université

- Maître de conférence
- Professeur
- Enseignants-chercheurs :
 - 50 % enseignement (université)
 - 192h / an
 - 50 % recherche



- Astronome adjoint
- Astronome
- Enseignants-chercheurs
 - 50 % recherche
 - 66h enseignement
 - Tâches de service

□ L'astronomie en France

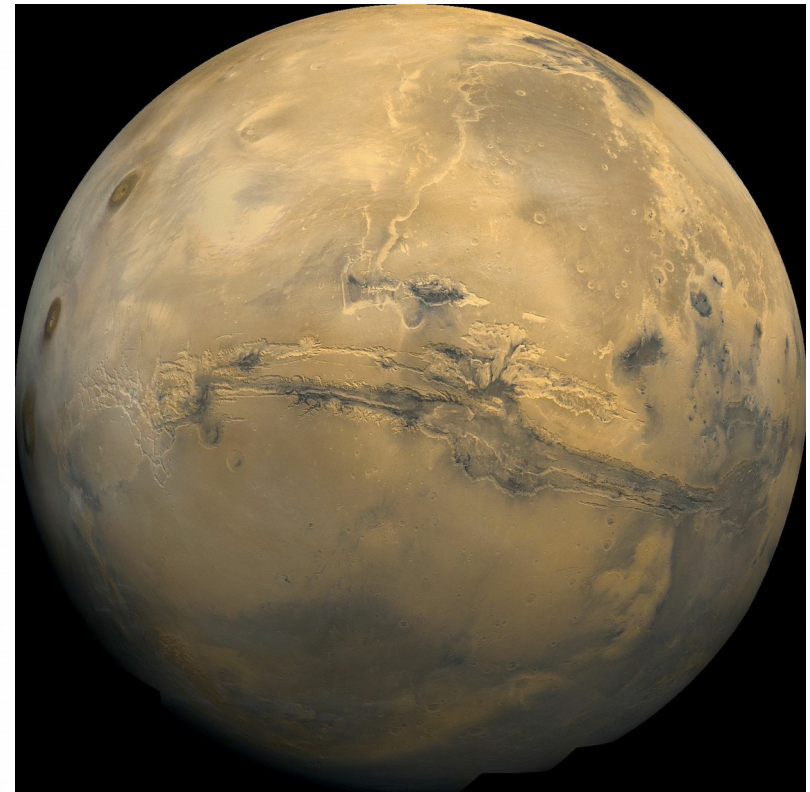
- Laboratoires
 - Intégrés aux universités
 - Observatoires INSU (CNRS)
- Environ 700 chercheurs professionnels
- Equipes composées de
 - Chercheurs
 - Ingénieurs
 - Techniciens

☐ Thématiques de recherche

- Nombreuses spécialités et sous-discipline en astronomie
 - Difficile de toutes les citer
- Du voisinage solaire à l'univers lointain
- Observateurs / théoriciens

☐ Système solaire

- Le Soleil
- Astéroïdes, comètes
- Planètes : structure, atmosphère
- Planètes naines



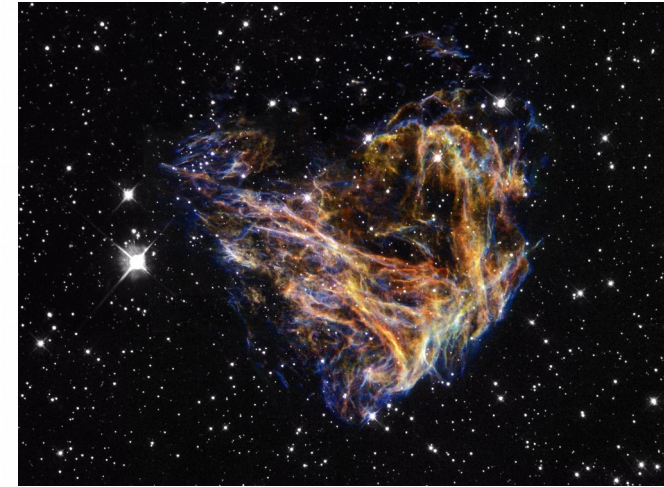
□ Les étoiles

- Structure interne
- Evolution
 - Étoiles géantes
 - Nébuleuses planétaires
 - Supernovae
- Etoiles binaires
- Etoiles variables
- Astérosimologie



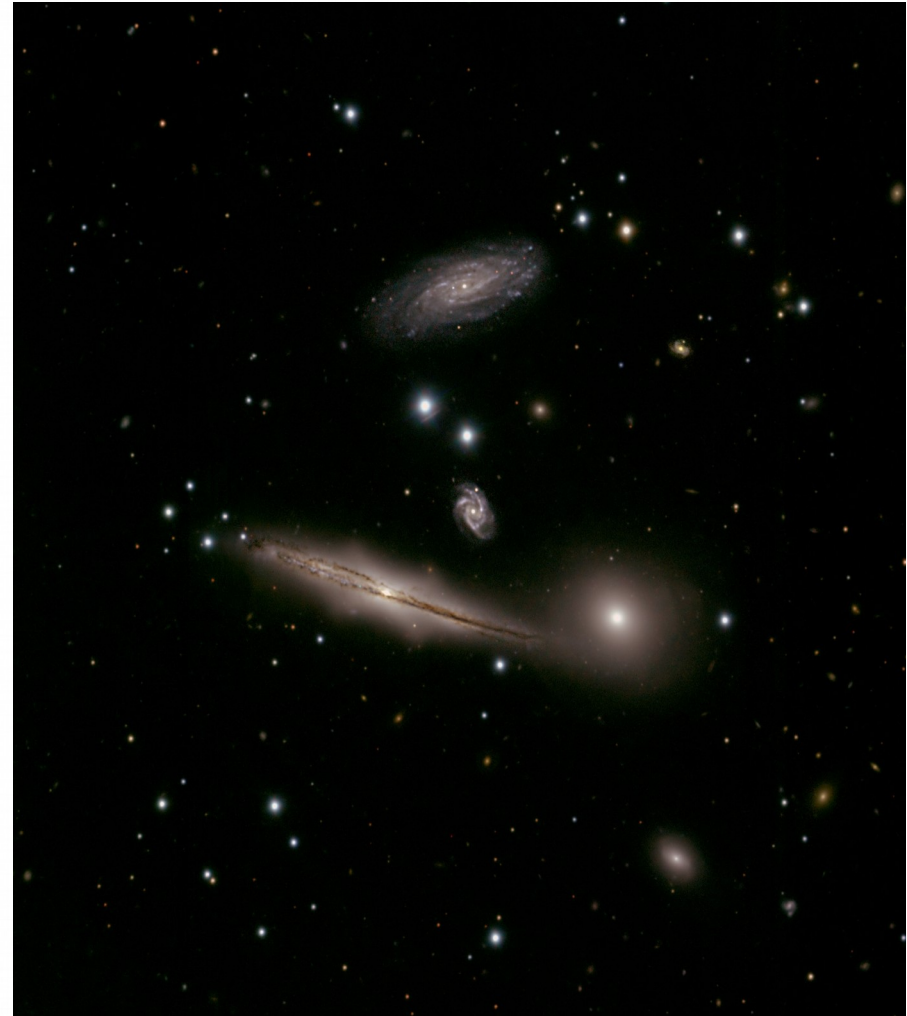
Galaxie

- Dynamique, chemo-dynamique
- Populations stellaires
- Amas (jeunes, globulaires)
- Milieu interstellaire



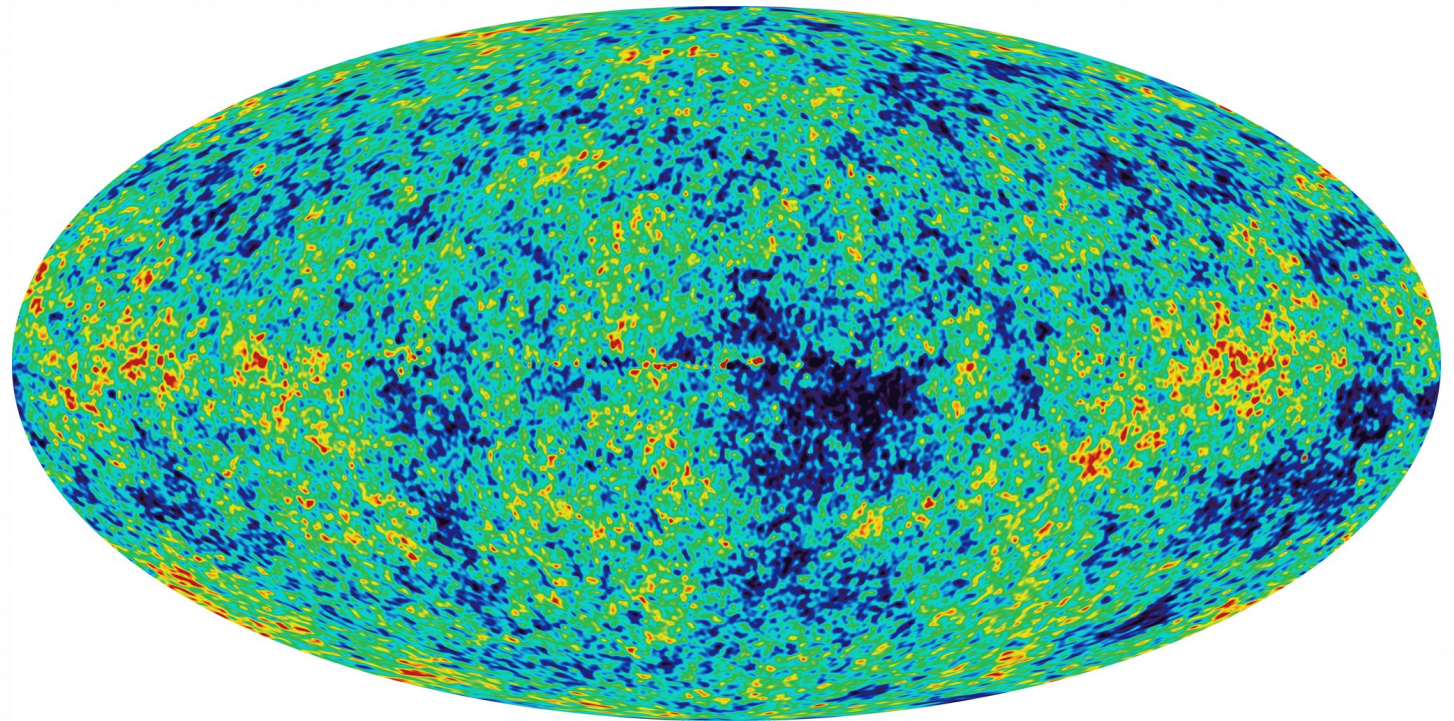
☐ Types d'objet

- Pulsars
- Quasars
- Blazars
- Lentilles gravitationnelles
- Naines blanches
- Etoiles à neutrons
- Trous noirs
- ...



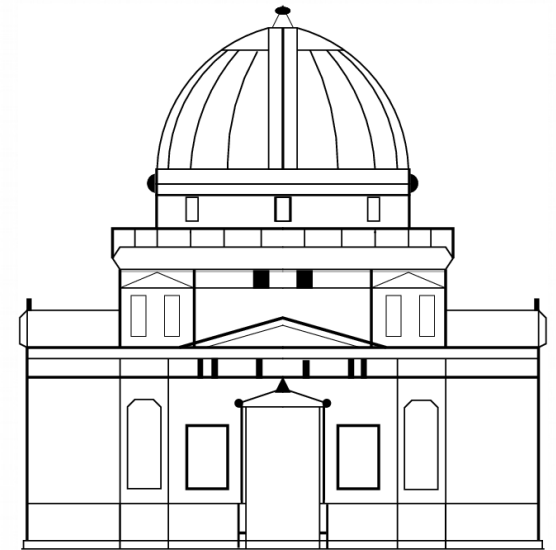
□ Grandes échelles

- Amas de galaxies
- Cosmologie observationnelle
- Théories



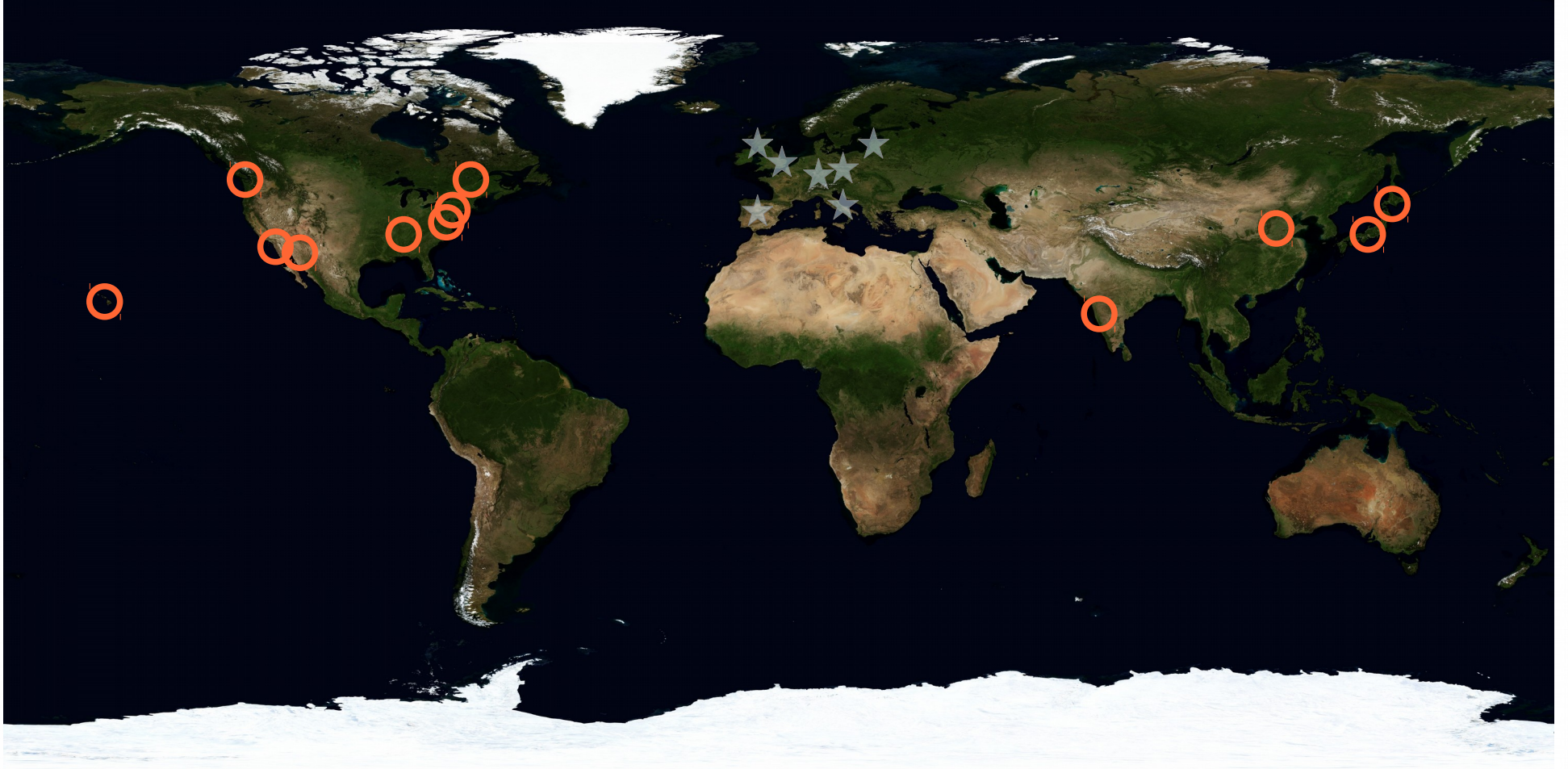
□ Observatoire de Strasbourg

- Equipe GALHECOS
« Galaxies, High Energy,
Cosmology, Compact Objects
& Stars »
- Equipe CDS
- Environ 70 personnes, 30 chercheurs



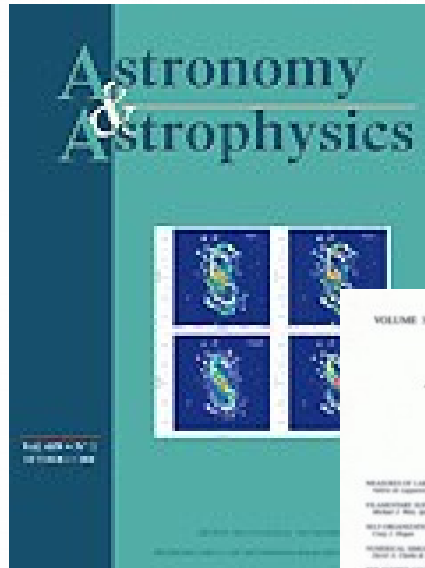
Observatoire astronomique
de Strasbourg

Collaborations





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