



Un nouveau catalogue de SEDs et de spectres de galaxies et les services VO associés

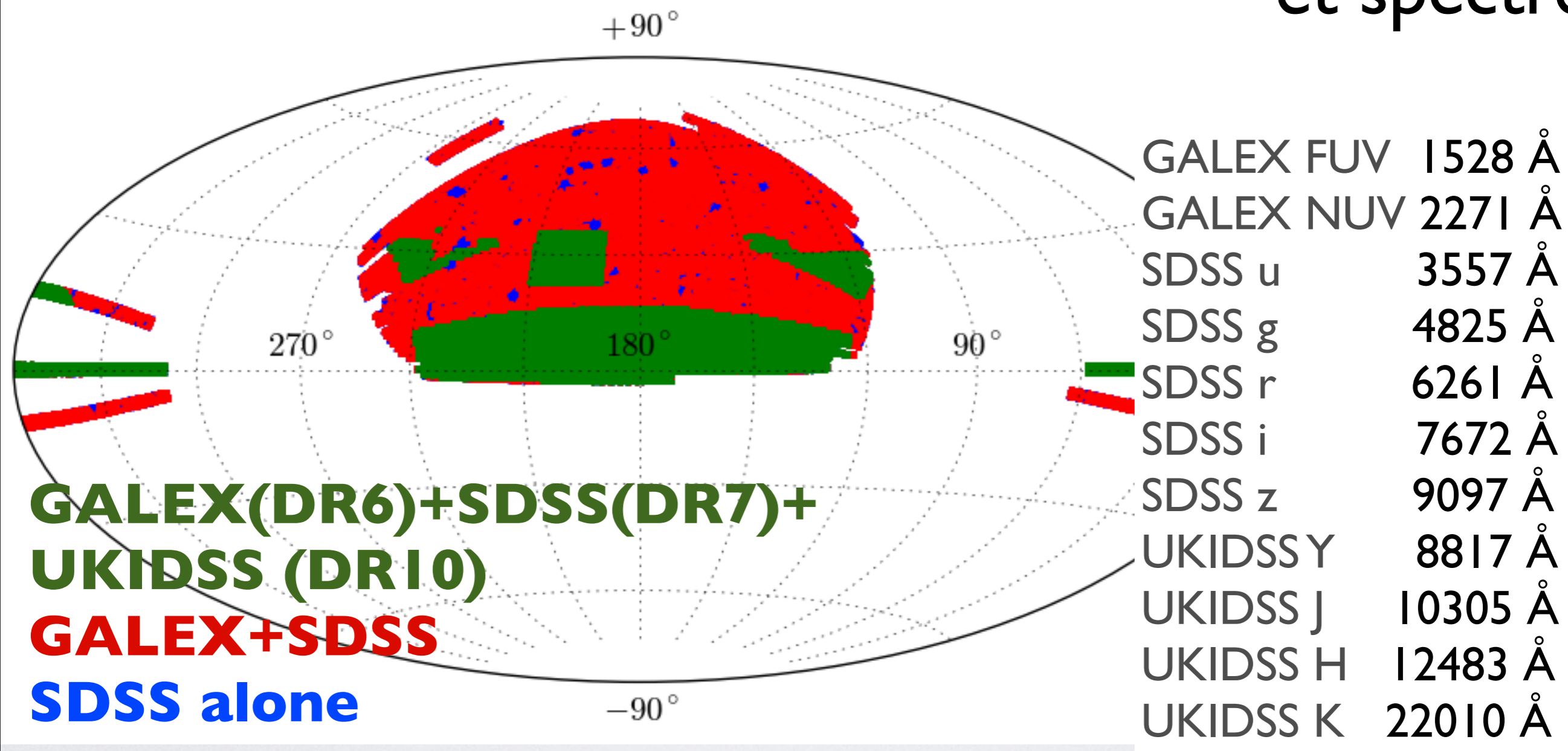
Anne-Laure Melchior (LERMA, UPMC, Observatoire de Paris)
Ivan Zolotukhin (IRAP, Toulouse)

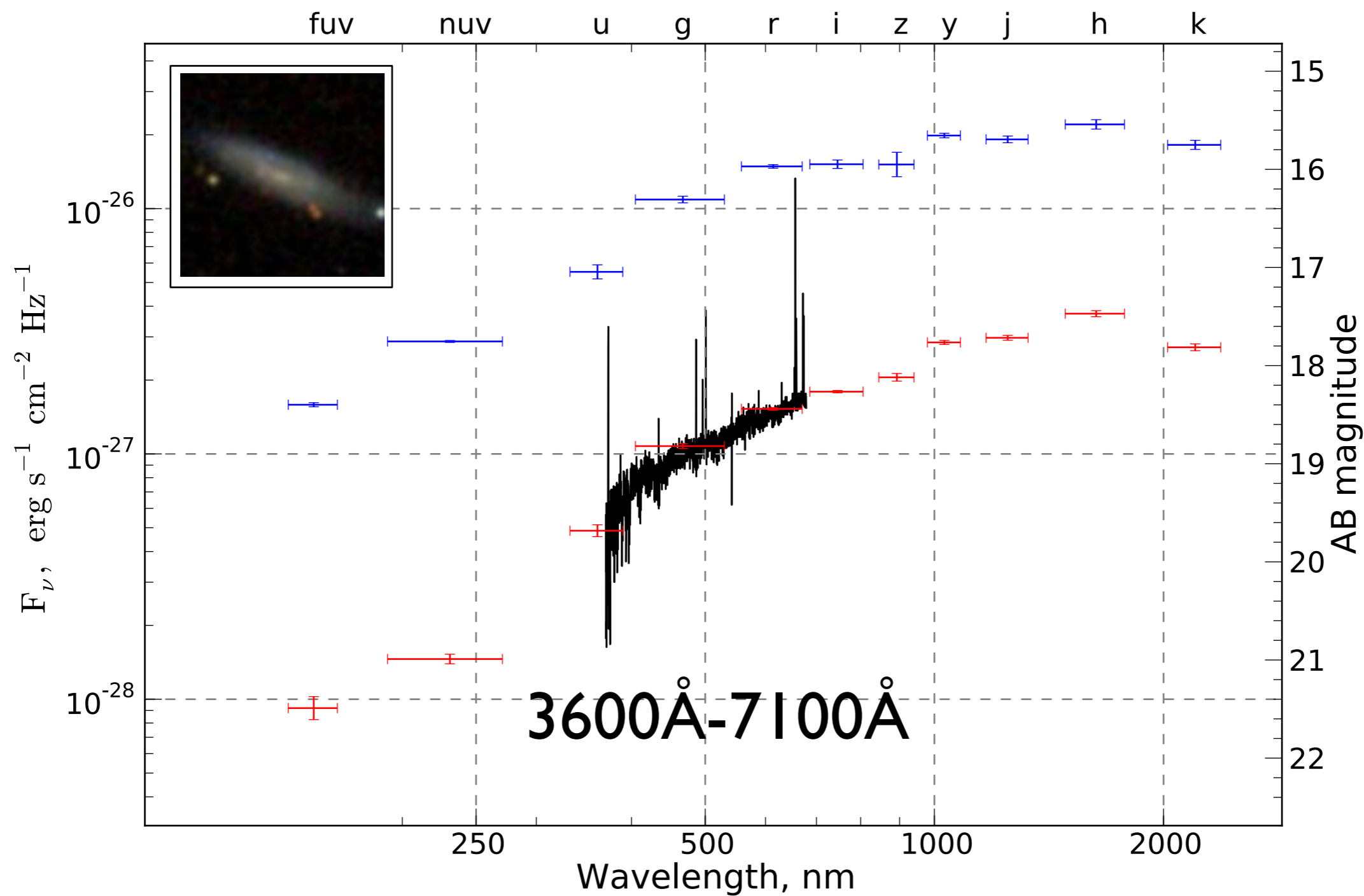
Collaborateurs : Igor Chilingarian (CfA, Harvard, USA)
Ivan Katkov & Evgenii Rubtsov (USM, Russie)

*RCSED A Reference Value-Added Catalogue of Spectral Energy Distributions
Chilingarian, Zolotukhin, Katkov, Melchior, Rubtsov, to be submitted*



800299 galaxies, 11 bandes photométriques, et spectres

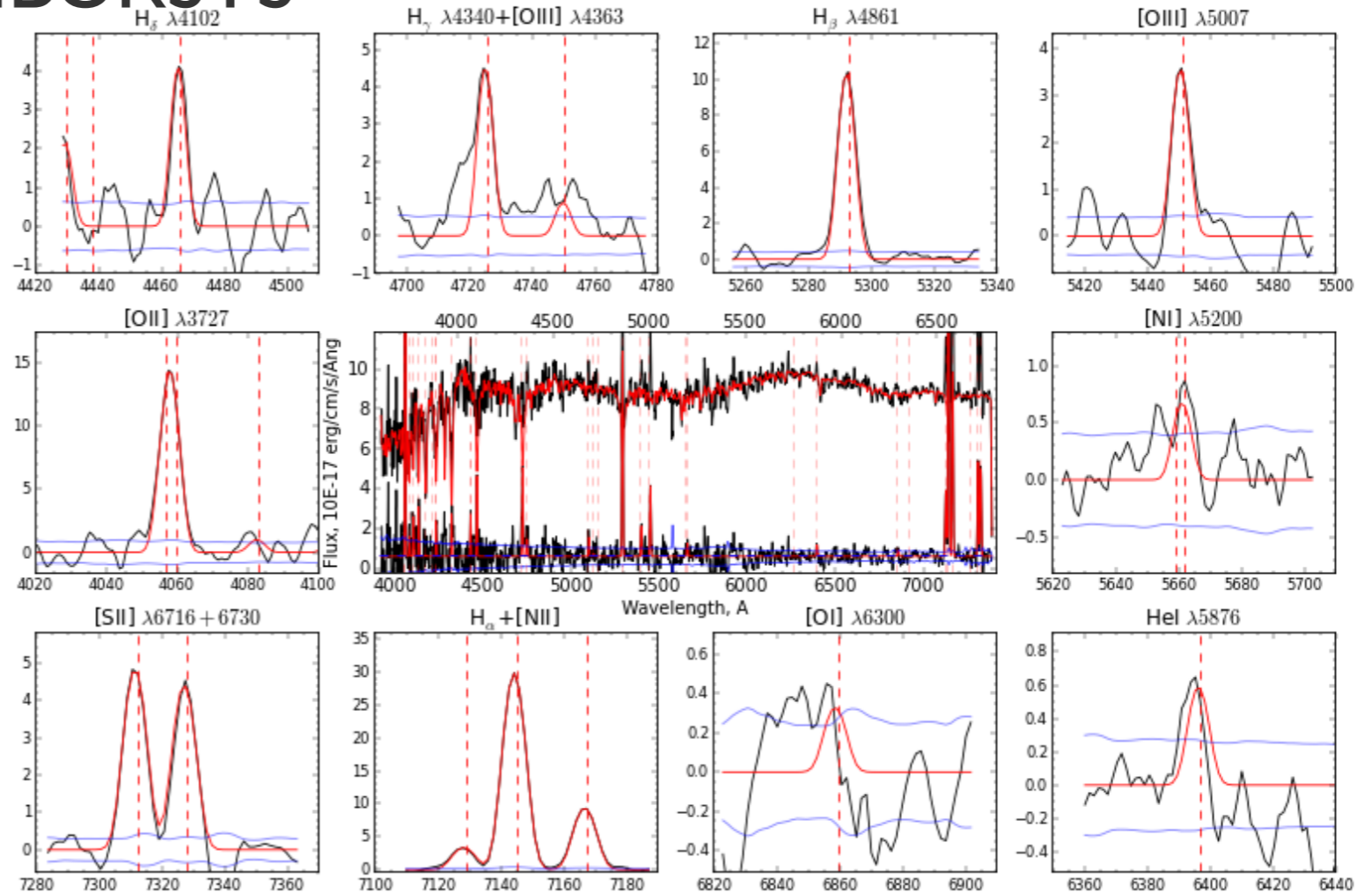
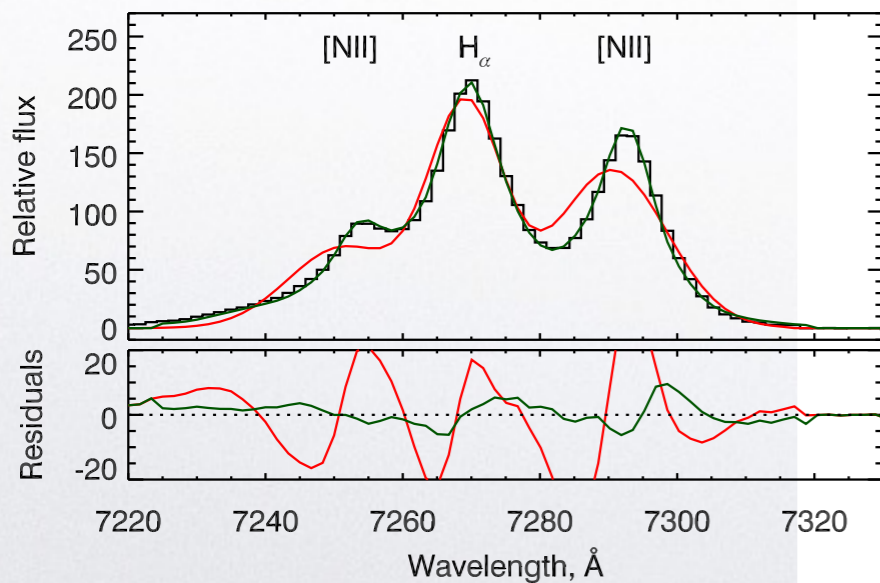


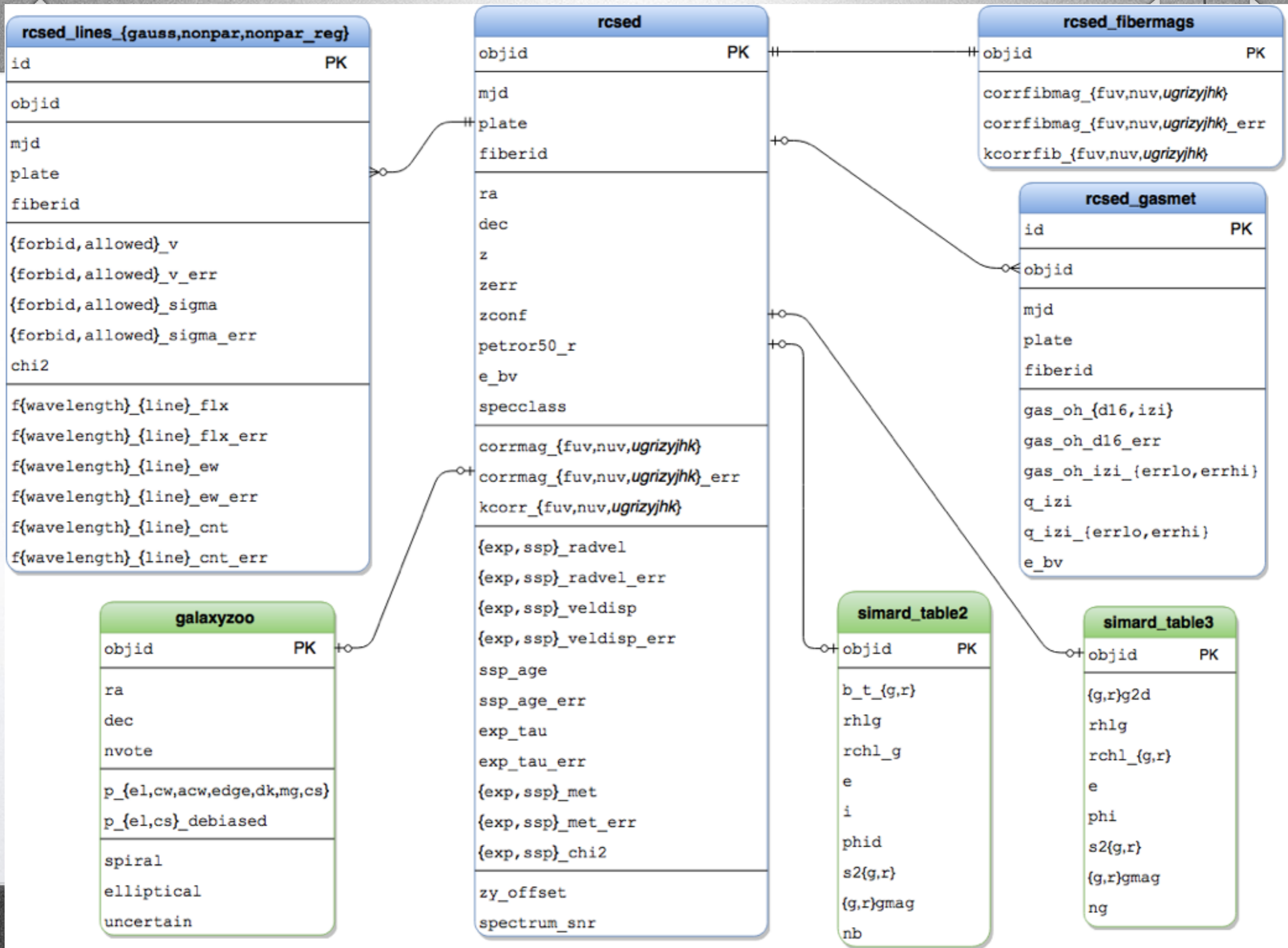




Une réanalyse des spectres SDSS du continuum stellaire et des raies d'émission

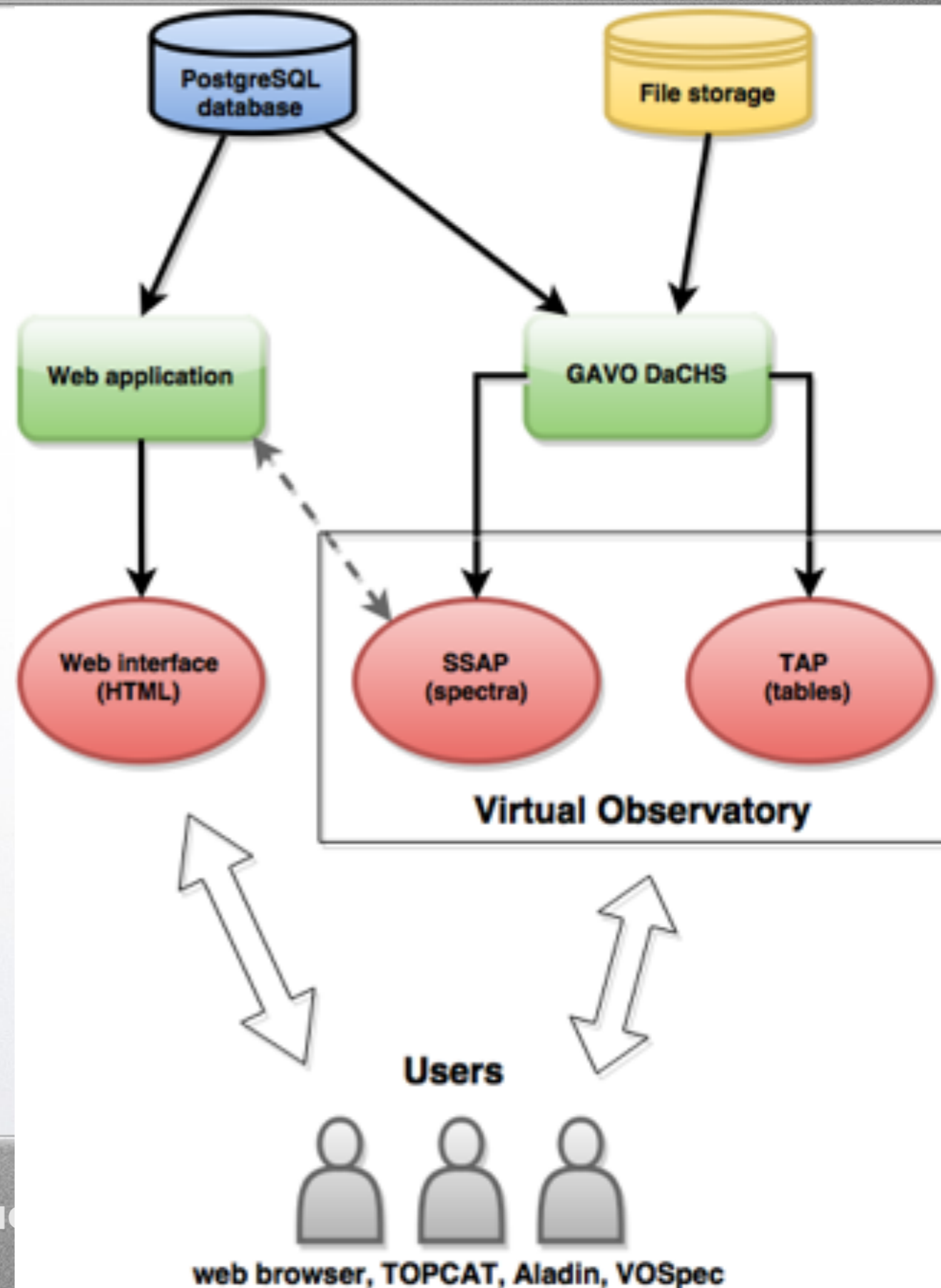
- Propriétés stellaires : NBURSTS
- Raies d'émission:
 - Gaussian fits
 - Non-parametric fits







Observatoire Virtuel





Observatoire Virtuel

- *GAVO DaCHS data center software suite:*
 - **Table Access Protocol** (9 tables : 10^6 galaxies, - 10^9 spectral line properties)
 - **Simple Spectral Access Protocol** (10^6 spectra + models)
- Web application <http://specphot.sai.msu.ru>



Observatoire Virtuel

RCSED LOGO

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Reference catalog of galaxy SEDs

Search RCSED catalog

Type search query. This could be anything: object name such as NGC 4889, coordinates: 195.03387775 27.97694, boolean expression: objid = 587741722823819274, cone search: cone('13:00:08 +27:58:37', '30arcmin').

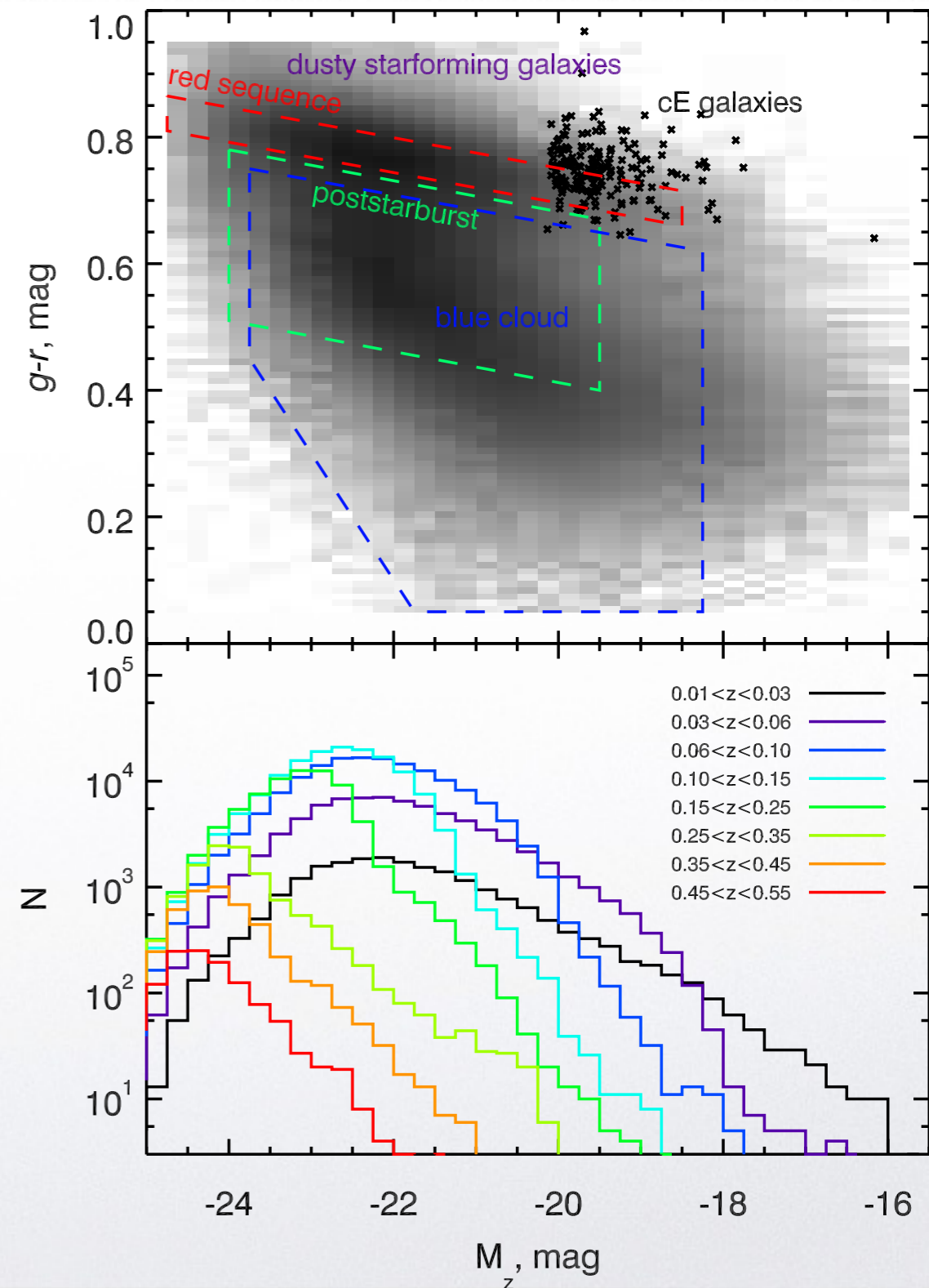
Réunion annuelle de l'Action Spécifique Observatoires Virtuels France
14-15 mars 2016

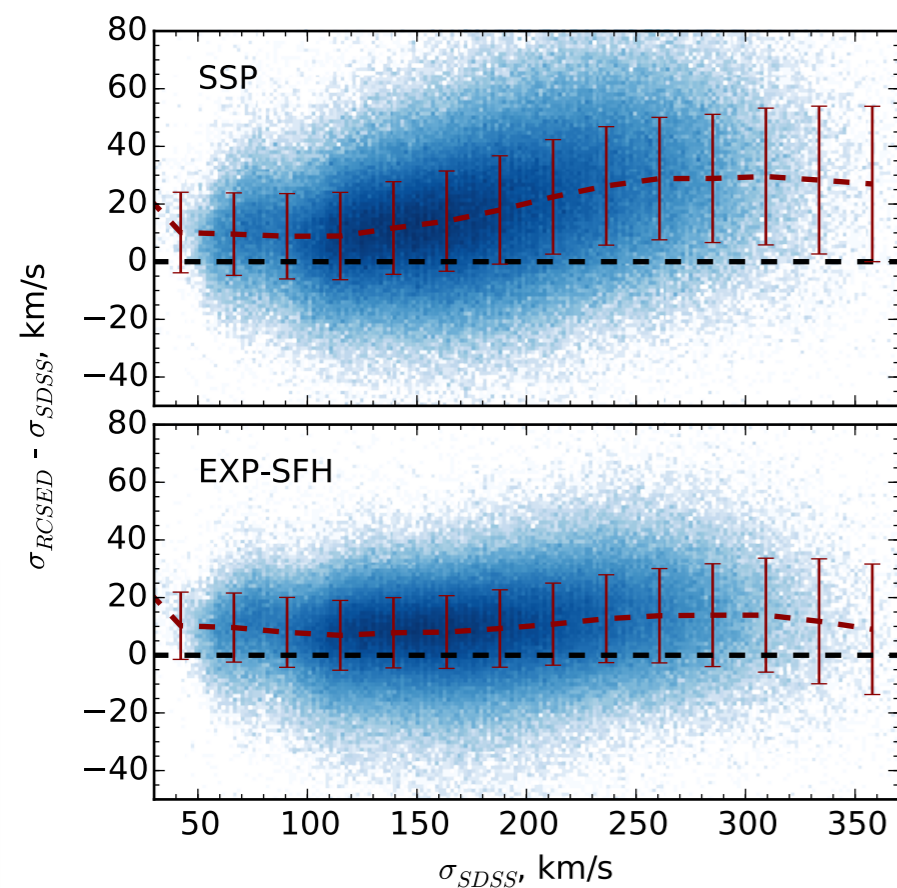


Complétude du catalogue, fonction de luminosité et biais (sélection des cibles)

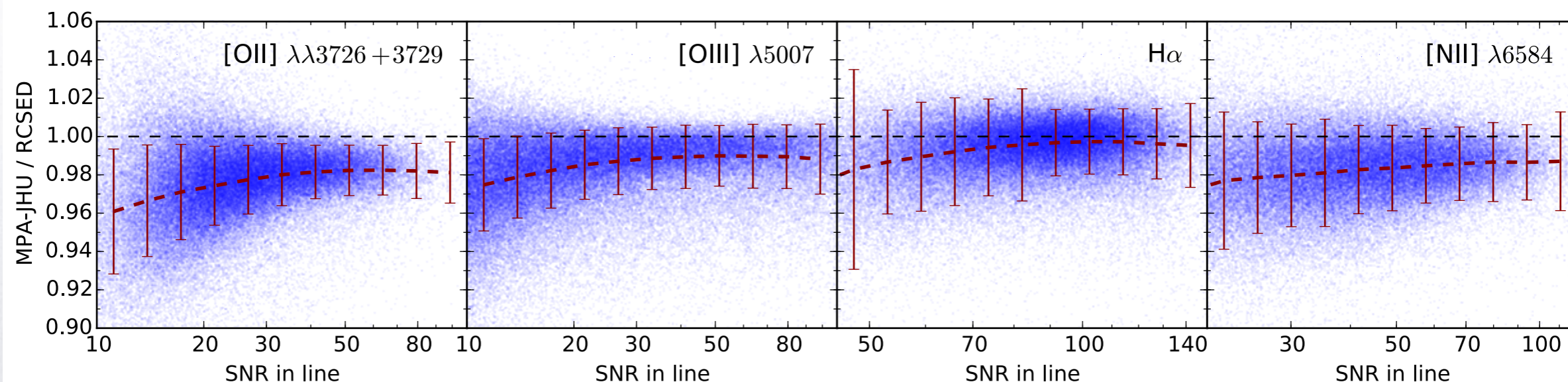
Photométrie : $r < 22$ AB mag

Spectroscopie : $r < 17,77$ AB mag



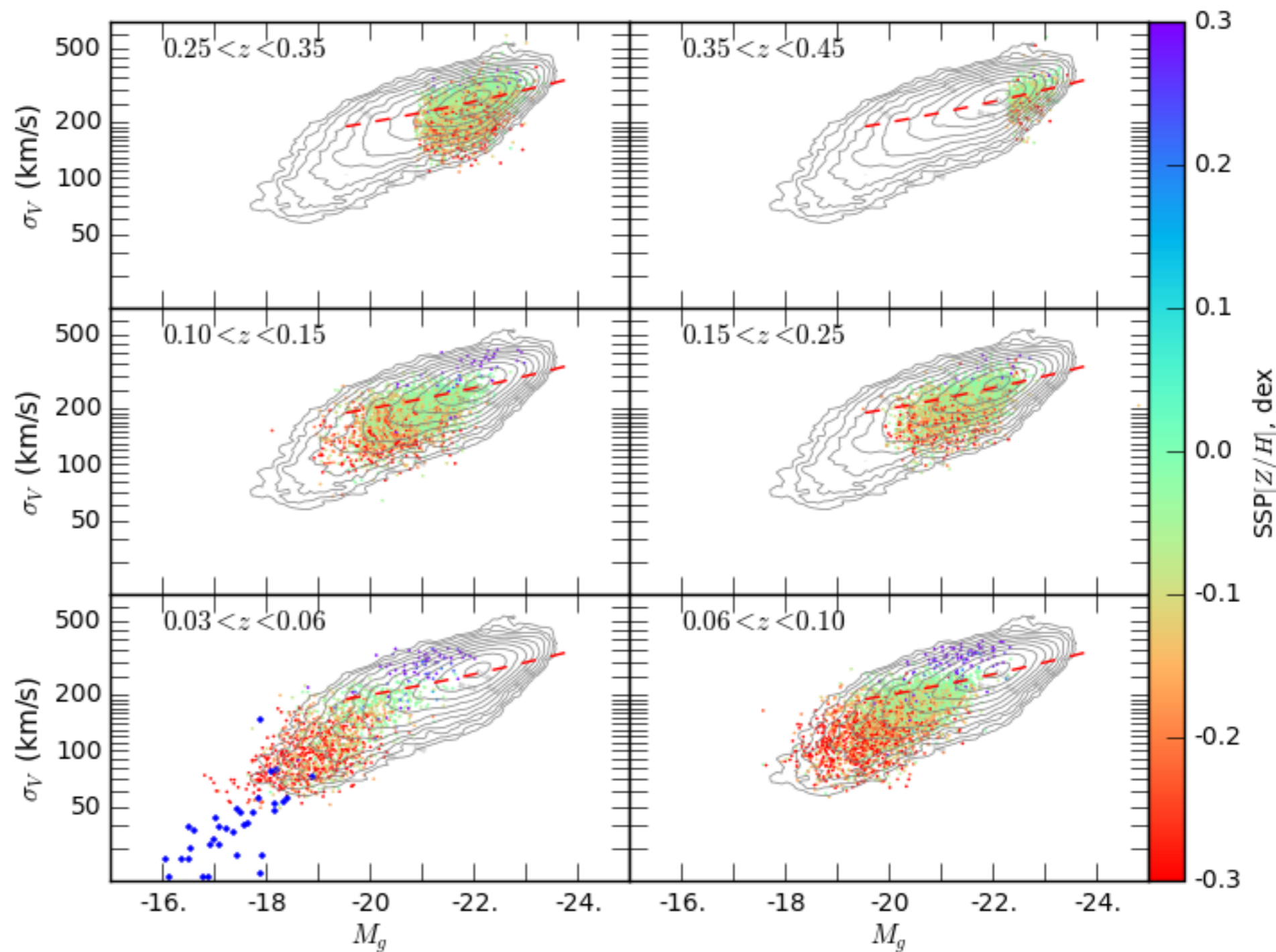


Comparaison avec SDSS, MPA-JHU





Faber-Jackson relation

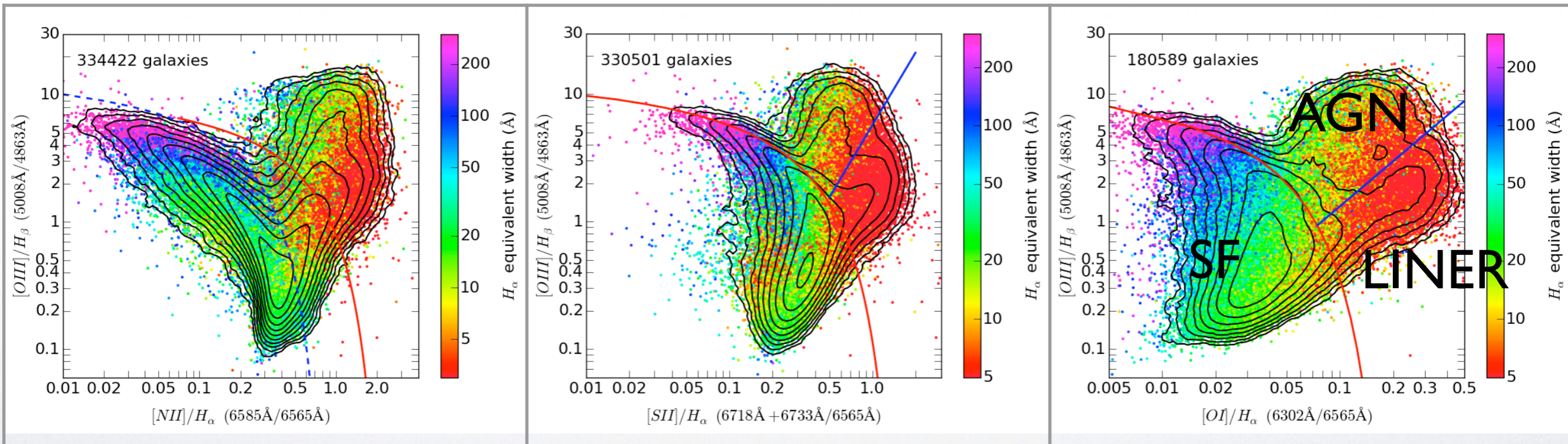




BPT diagram

Baldwin, Philipps & Terlevich (1981) classification

Kewley et al. (2006)





Tutoriels VO

- ADASS 2010 (Boston),
- ADASS 2012 (Urbana),
- ADASS 2015 (Sydney),
- Plusieurs rencontres *IVOA Interop* 2010-2015

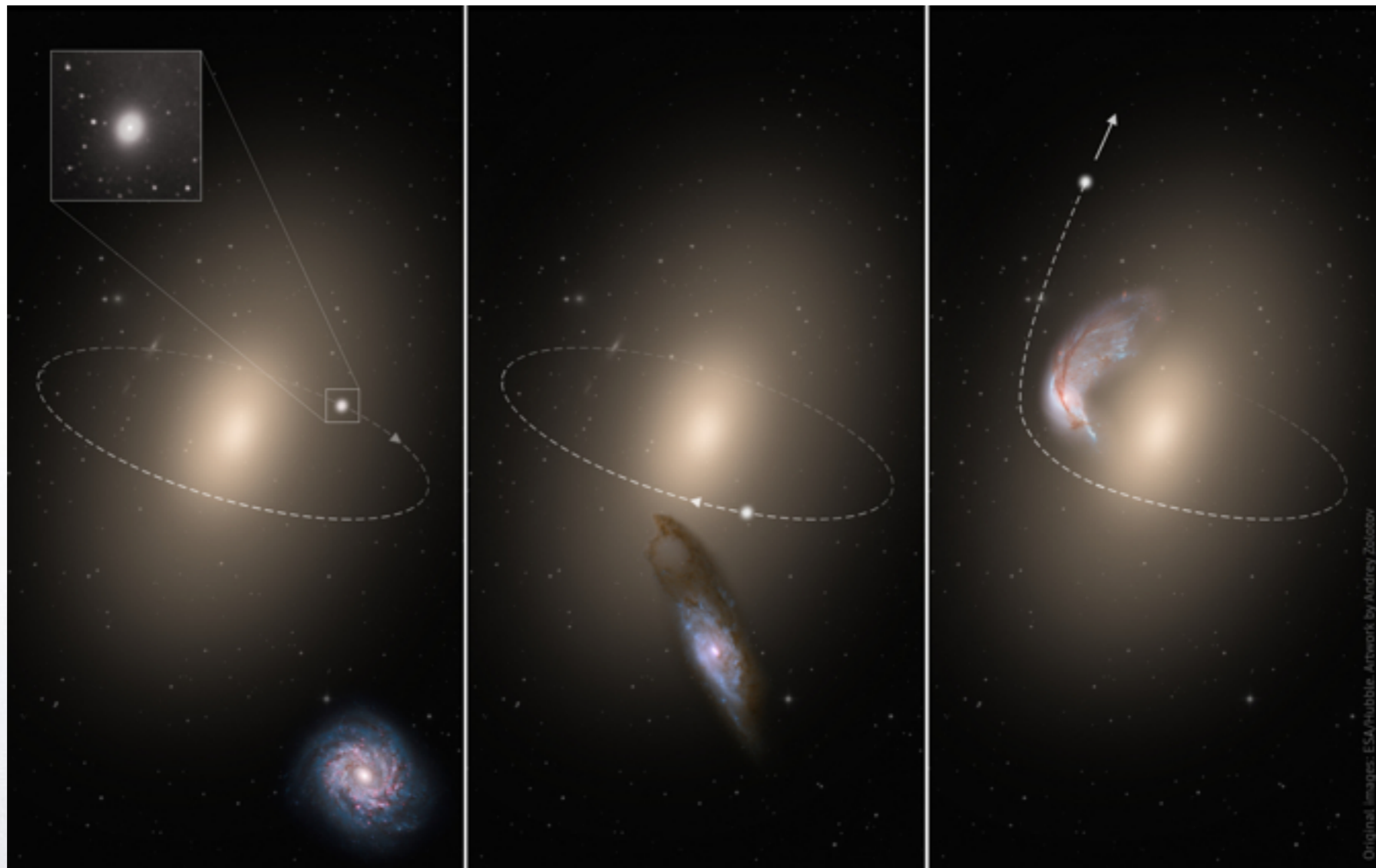


Résultats basés sur le catalogue

- Chilingarian, Melchior, Zolotukhin, MNRAS 2010
- Chilingarian & Zolotukhin, MNRAS, 2012
- Chilingarian & Zolotukhin, **Science**, 2015



Résultats / catalogue



Communiqué de presse du CNRS : <http://www.insu.cnrs.fr/node/5278>



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Merci