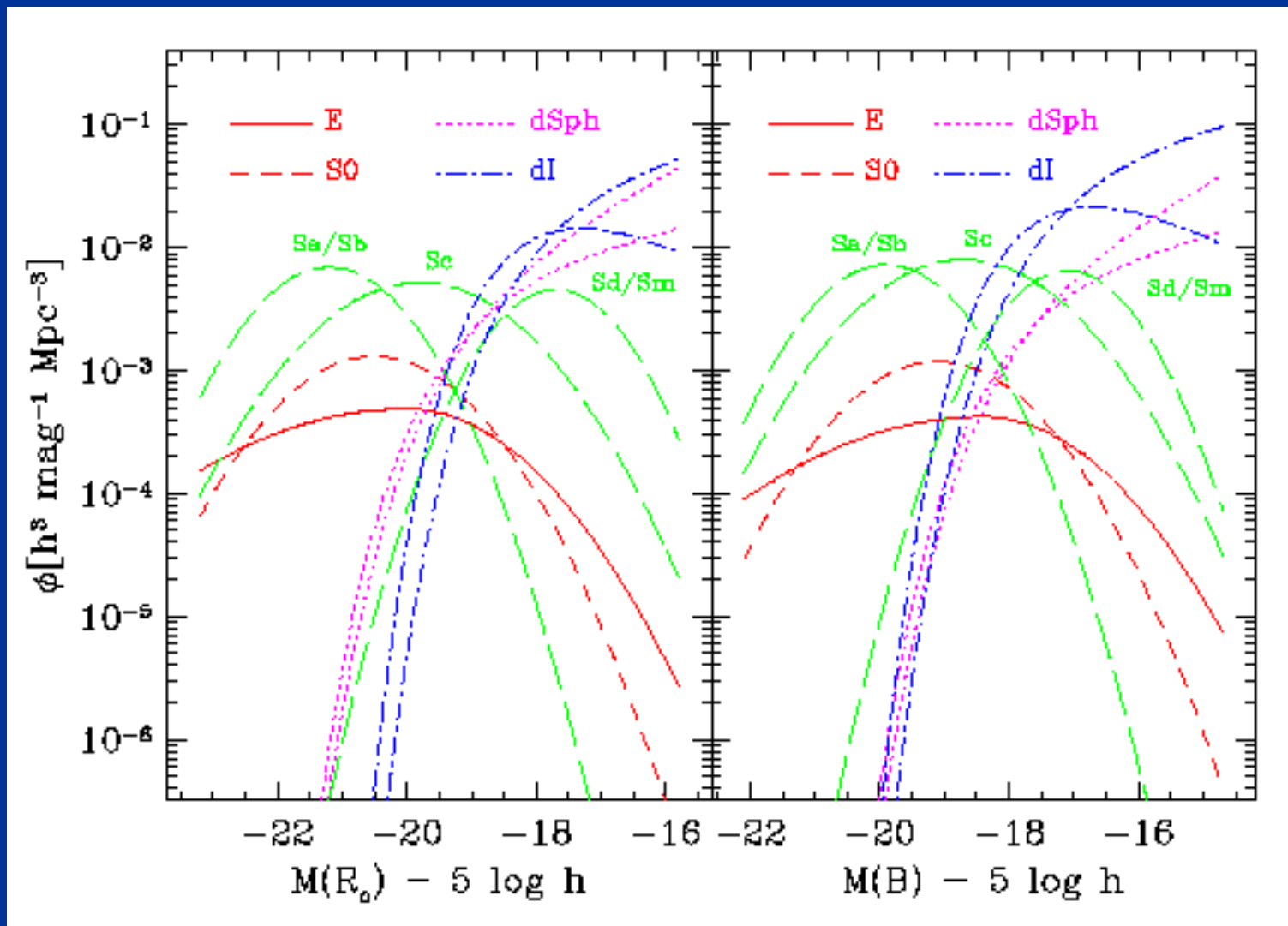
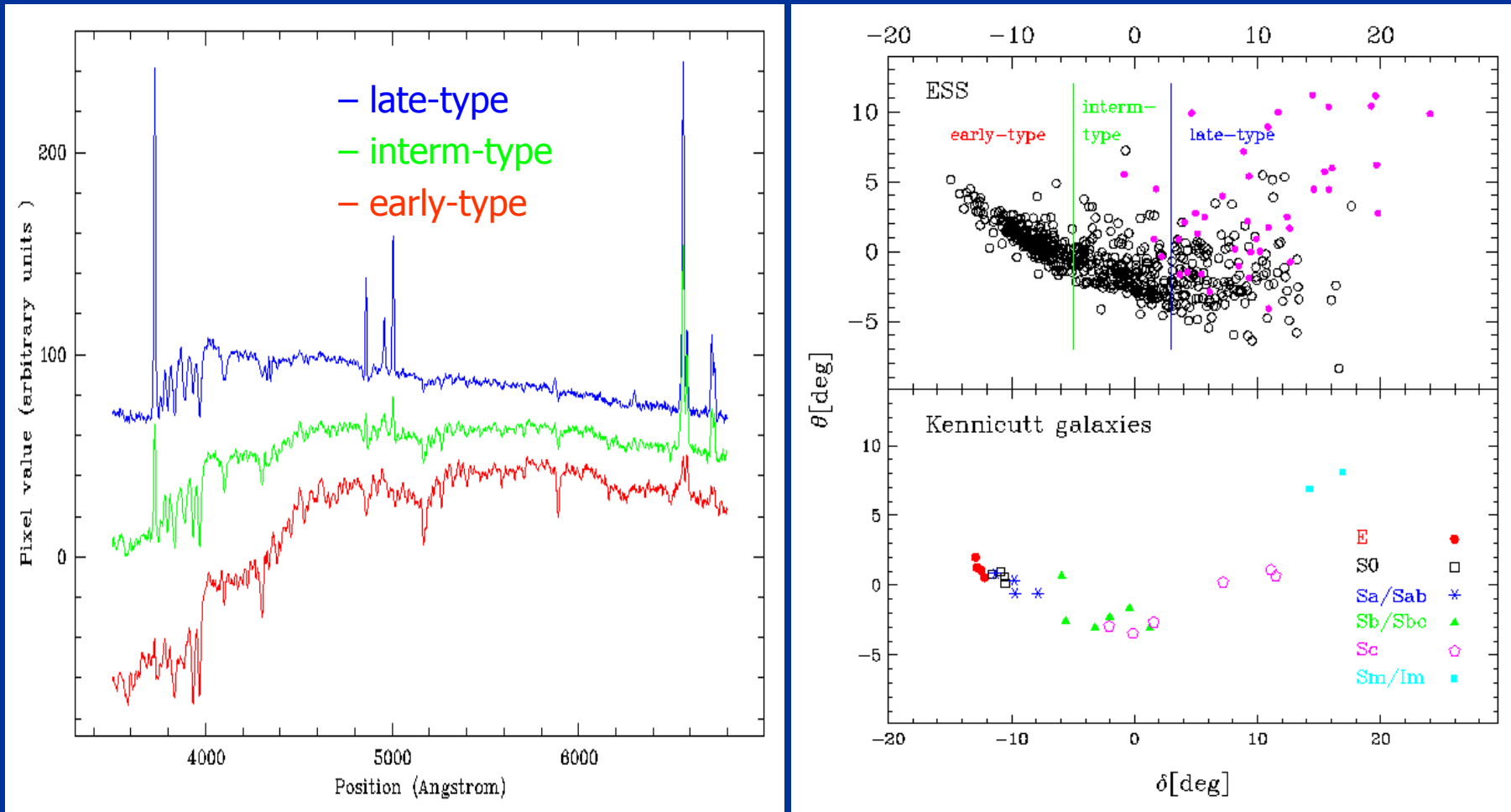


# Les fonctions de luminosité locales



Sandage, Binggeli, Tammann 1985 – Jerjen, Tammann 1997  
de Lapparent 2003, A&A

# Classification spectrale de l'ESS



Galaz, de Lapparent 1998, A&A

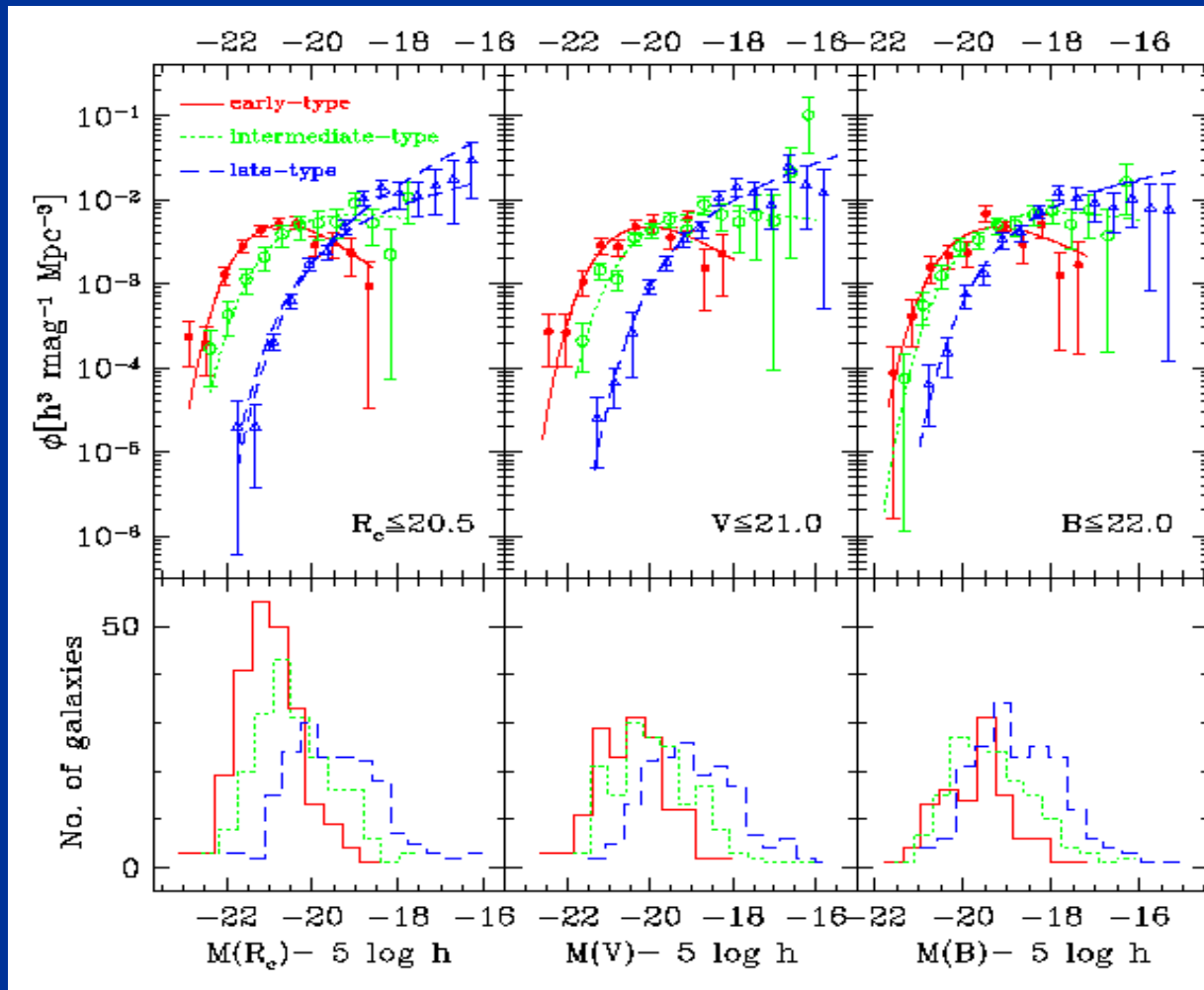
de Lapparent, Galaz, Bardelli, Arnouts 2003, A&A

# Fonctions de luminosité de l'ESS

- Fonction de Schechter (1976)

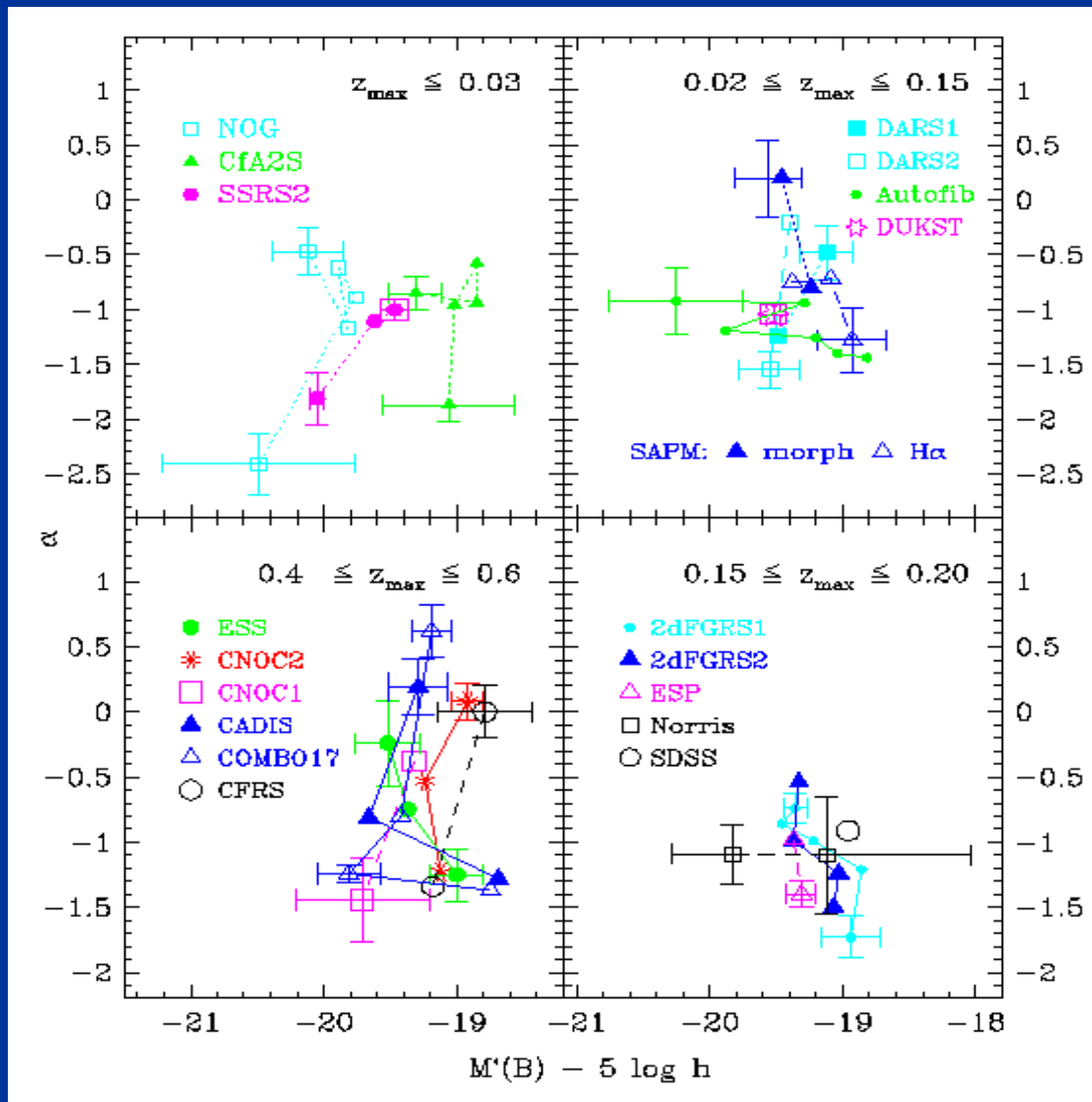
$$\phi(M)dM \propto \phi^* e^{-\frac{L}{L^*}} \frac{L}{L^*}^{\alpha+1} dM$$

$$\frac{L}{L^*} = 10^{0.4(M^* - M)}$$



de Lapparent, Galaz,  
Bardelli, Arnouts 2003, A&A

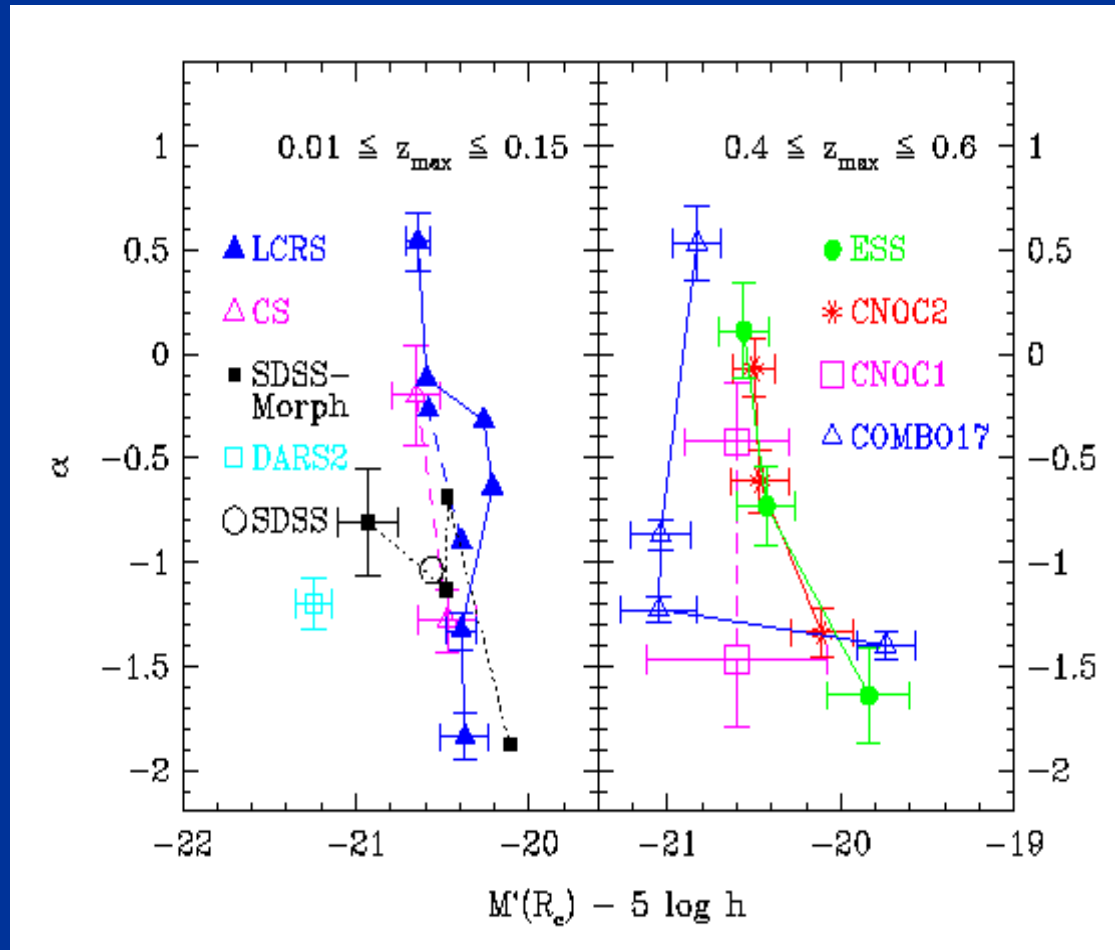
# Les fonct. luminosité par type en B



de Lapparent 2003, A&A

- Type morphologique :
  - CfA2 (Marzke et al. 1994)
  - SSRS2 (Marzke et al. 1998)
  - NOG (Marinoni et al. 1999)
  - SAPM (Lovevay et al. 1992)
  - DARS1 (Efstathiou et al. 1998)
- Couleur:
  - CFRS (Lilly et al. 1995)
  - DARS2 (Metcalf et al. 1998)
- Raies en émission :
  - SAPM (Loveday et al. 1999)
  - ESP (Zucca et al. 1997)
  - NORRIS (Small et al. 1997)
- Corrélation-croisée :
  - AUTOFIB (Heyl et al. 1997)
- Spectroscopie multi-fibre :
  - 2dFGRS1 (Folkes et al. 1999)
  - 2dFGRS2 (Madgwick et al. 2002)

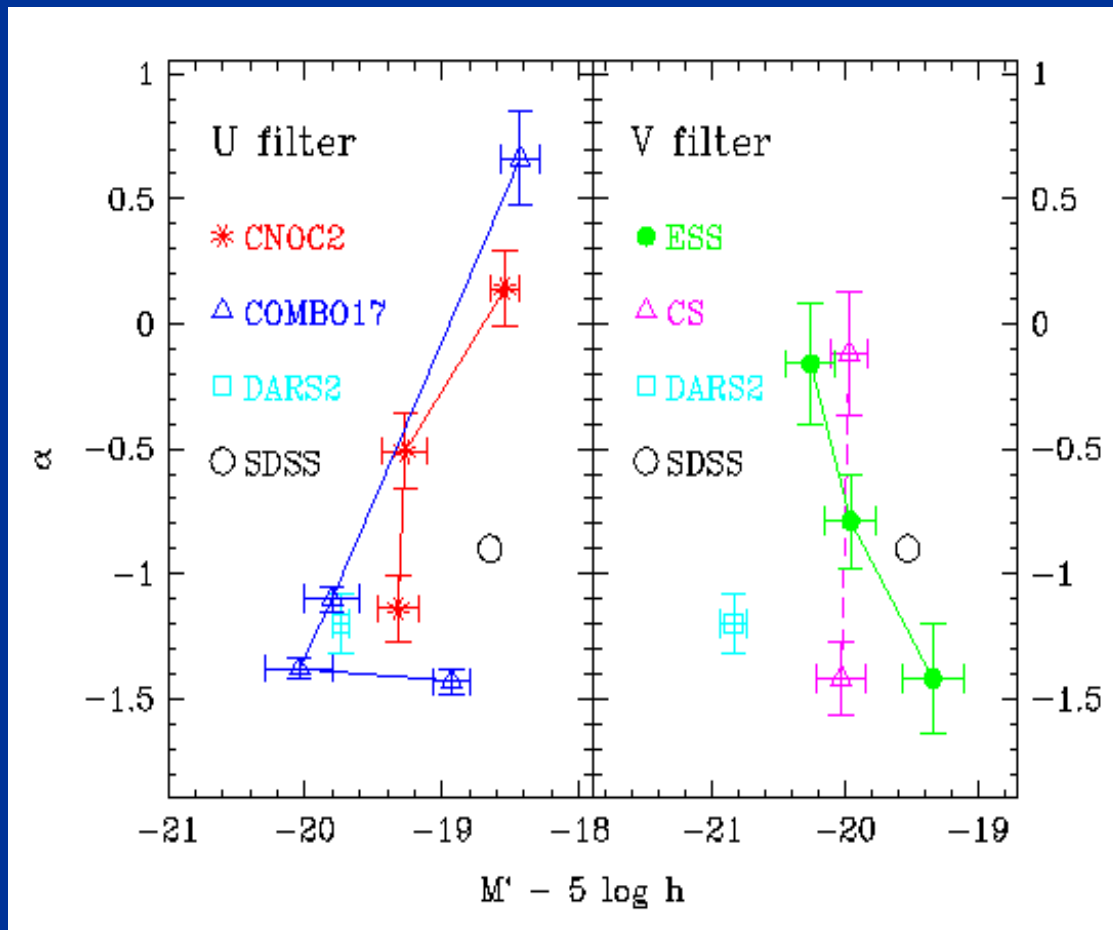
# Les fonct. luminosité par type en Rc



- Type spectral :
  - ESS (de Lapparent et al. 2003)
  - CNOc2 (Lin et al. 1999)
  - COMBO17 (Wolf et al. 2003)
  - LCRS (Bromley et al. 1998)
- Couleur :
  - CNOc1 (Lin et al. 1997)
  - CS (Brown et al. 2001)
- Type morphologique :
  - SDSS (Nakamura et al. 2003)

de Lapparent 2003, A&A

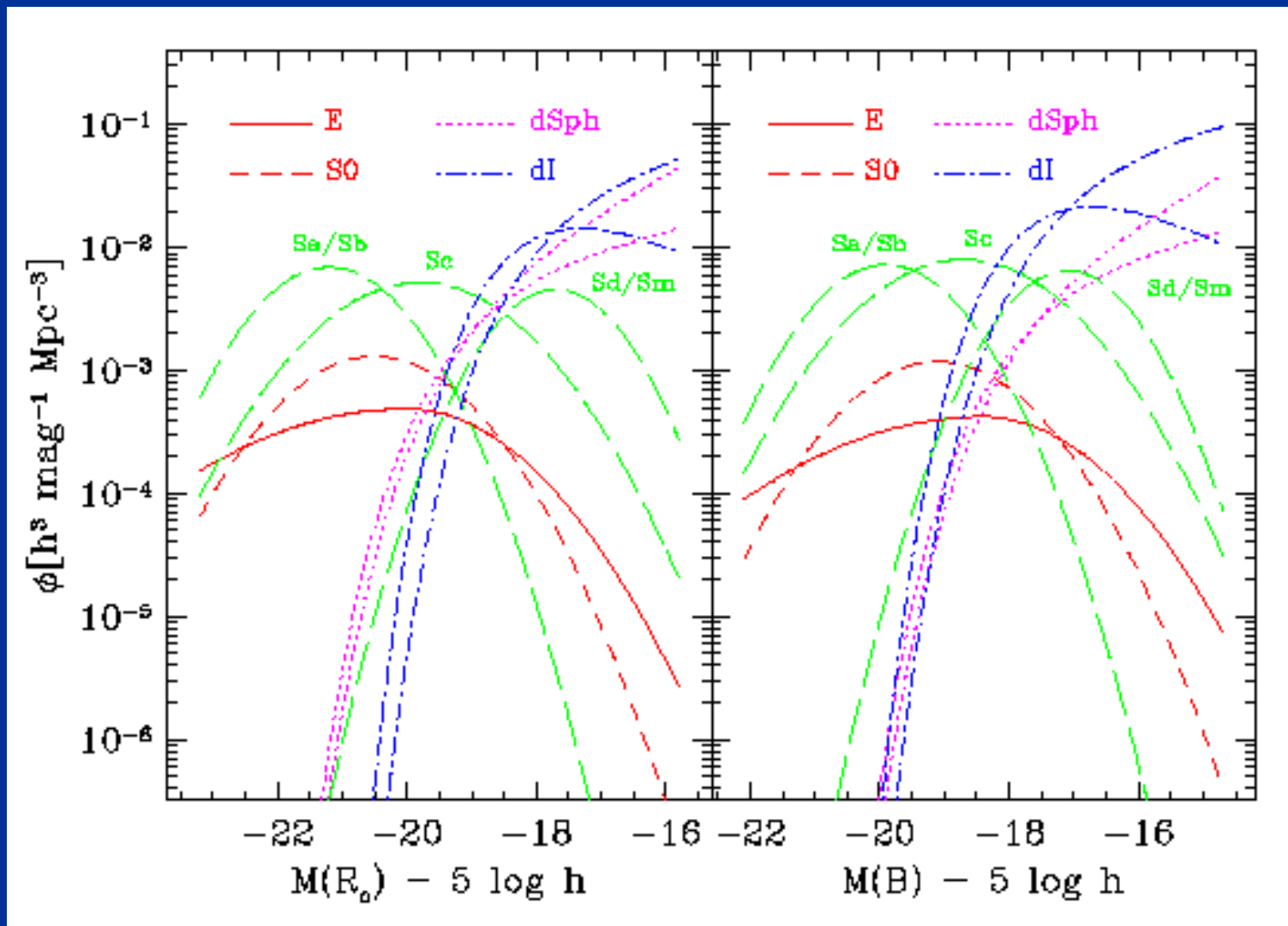
# Les fonct. luminosité par type en U - V



- Type spectral :
  - ESS (de Lapparent et al. 2003)
  - CNOC2 (Lin et al. 1999)
  - COMBO17 (Wolf et al. 2003)
- Couleur :
  - CS (Brown et al. 2001)

de Lapparent 2003, A&A

# Les fonctions de luminosité locales



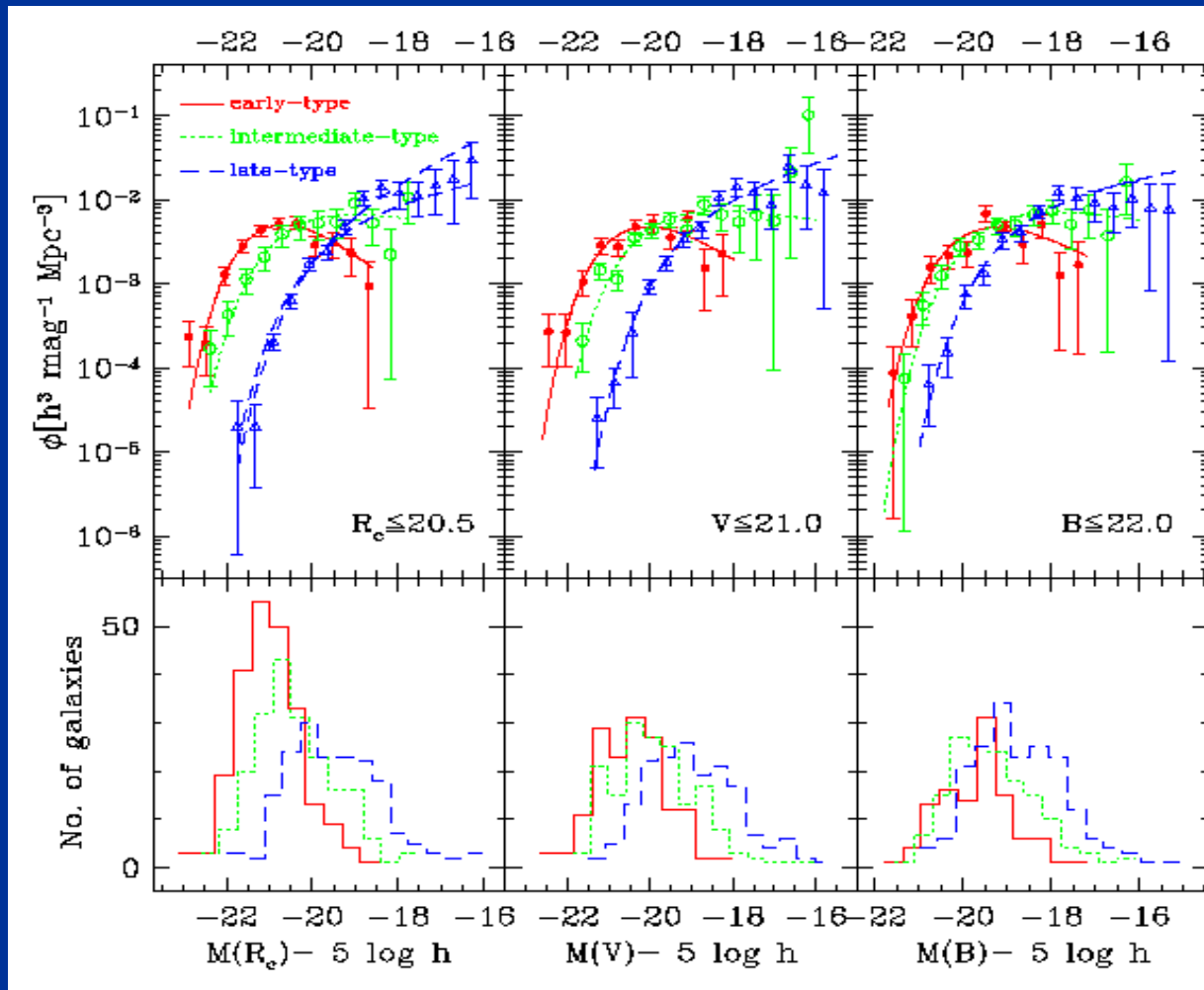
Sandage, Binggeli, Tammann 1985 – Jerjen, Tammann 1997  
de Lapparent 2003, A&A

# Fonctions de luminosité de l'ESS

- Fonction de Schechter (1976)

$$\phi(M)dM \propto \phi^* e^{-\frac{L}{L^*}} \frac{L}{L^*}^{\alpha+1} dM$$

$$\frac{L}{L^*} = 10^{0.4(M^* - M)}$$

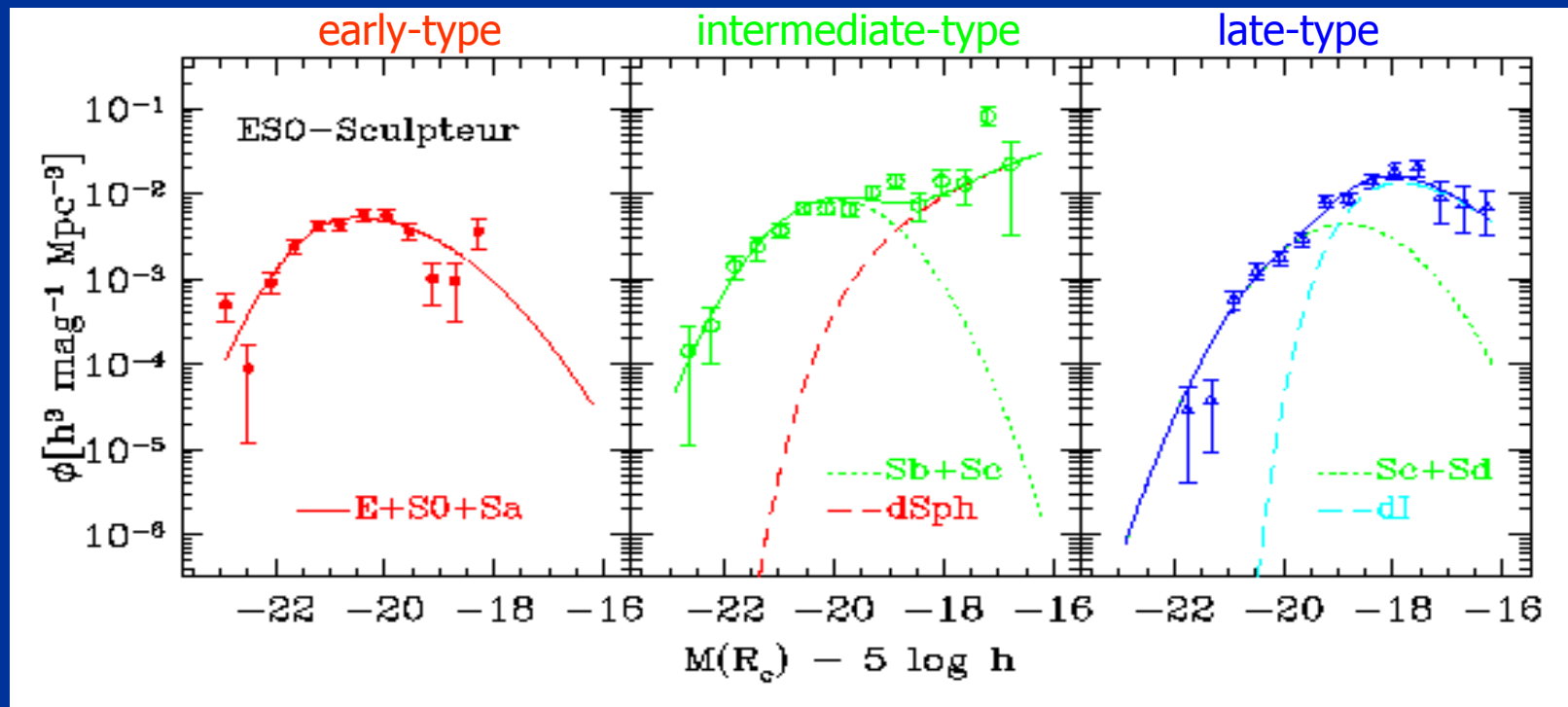


de Lapparent, Galaz,  
Bardelli, Arnouts 2003, A&A



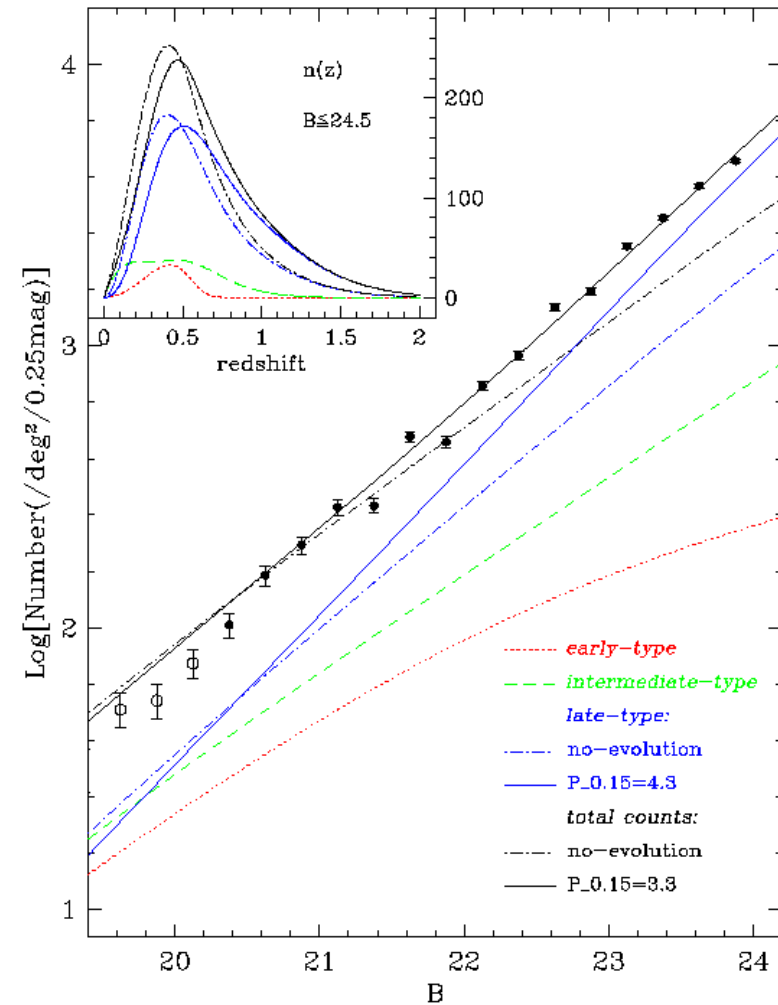
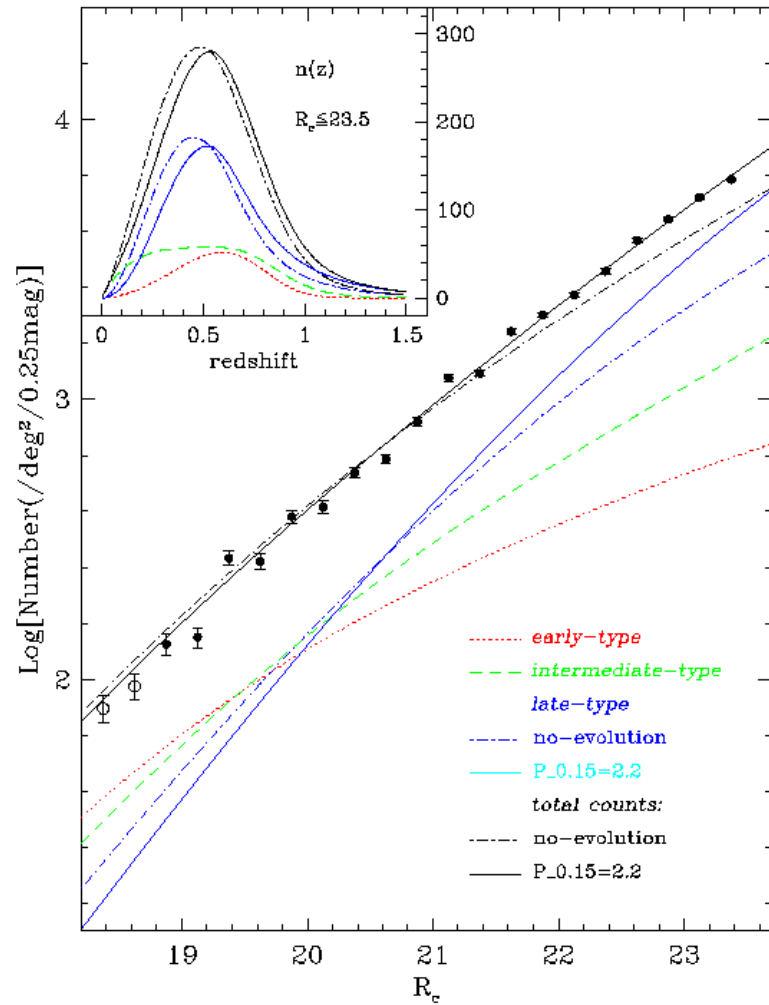
# Fonctions de luminosité composites

- FL Gaussienne (galaxies géantes) + FL Schechter (galaxies naines)

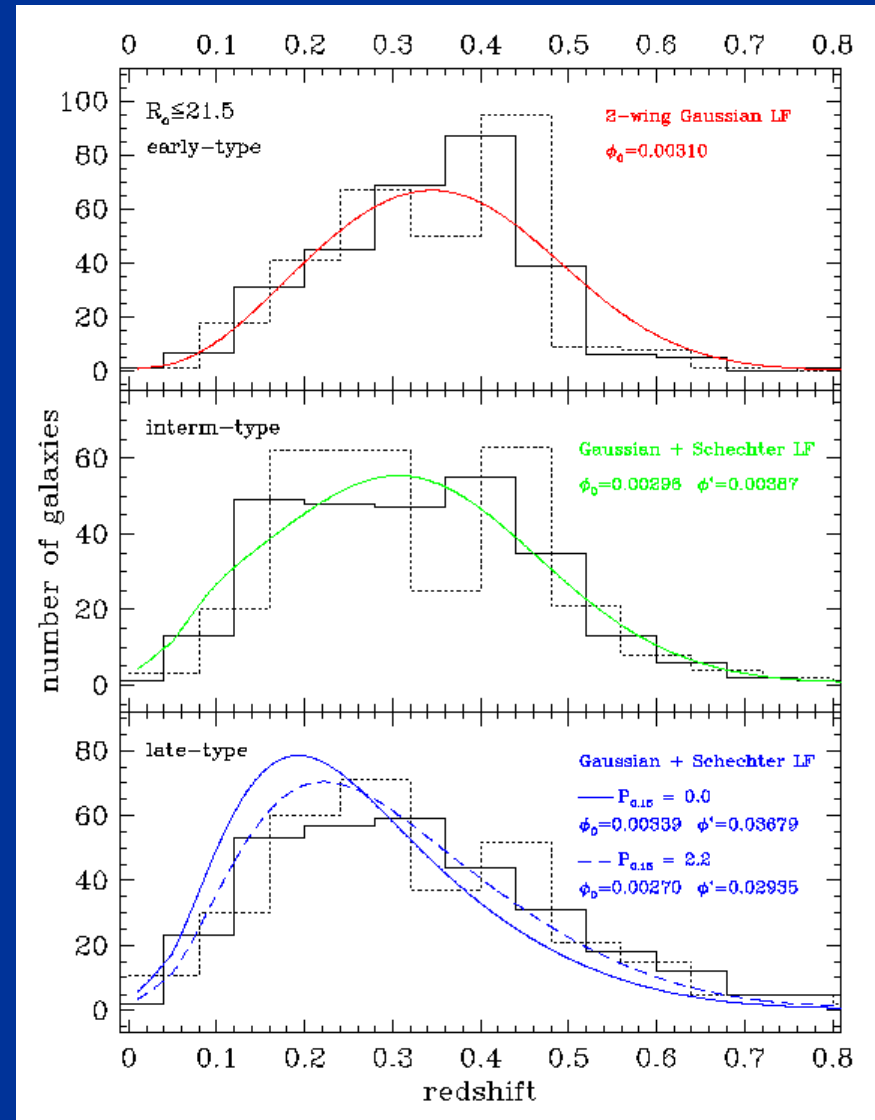
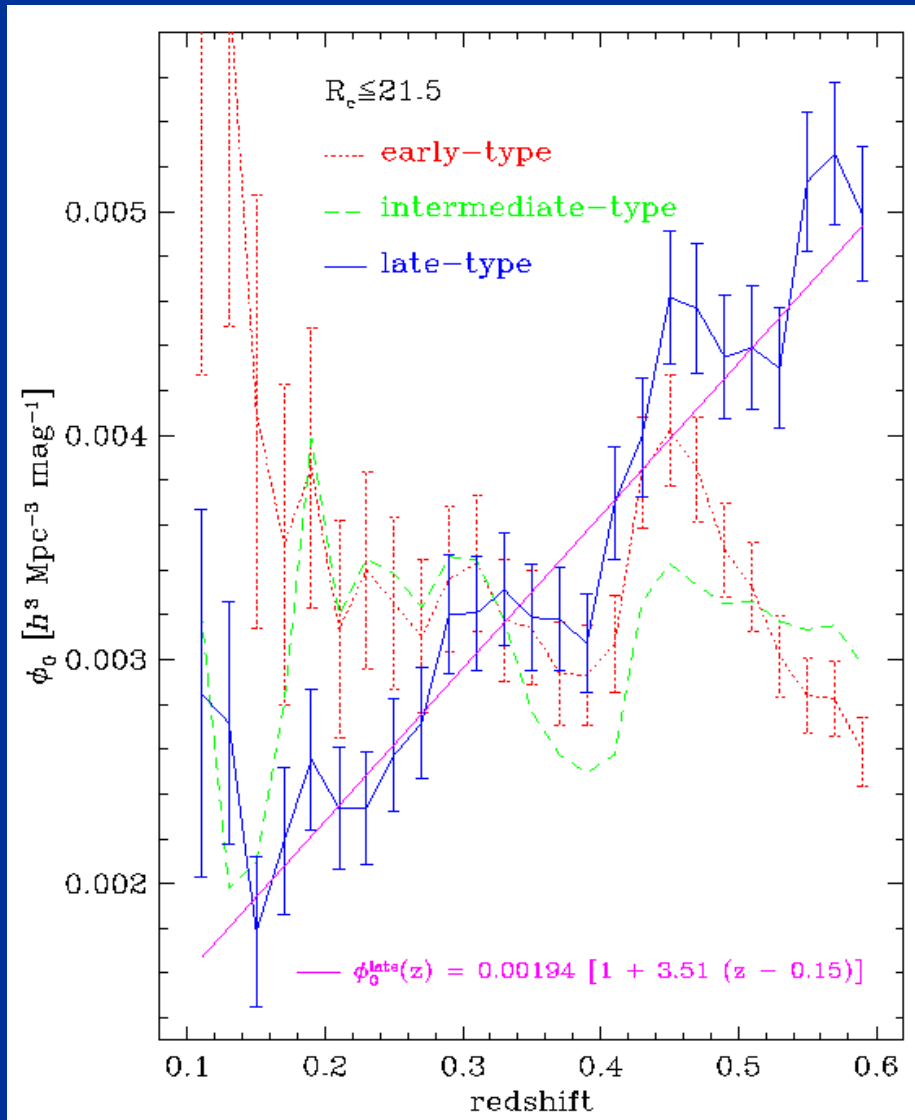


de Lapparent, Galaz, Bardelli, Arnouts 2003, A&A

# Les comptages optiques ESS



# Evolution des spirales tardives ESS



de Lapparent, Arnouts, Galaz, Bardelli 2004, A&A