

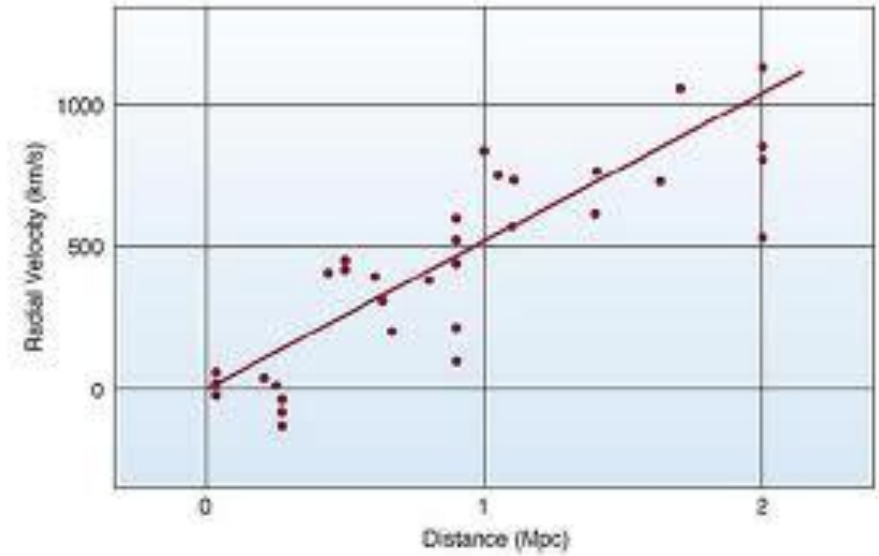
Kozmoloji

Arif Bayırlı – Boğaziçi Üniversitesi

Evren Geniřliiyor!



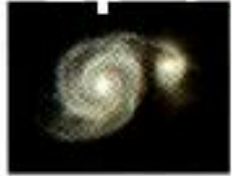
Lemaitre



Hesaplanan uzaklık $H_0 = 65 \text{ km/sec/Mpc}$

15 Mpc

50 million ly



Komşu kümede bir gökada

H & K

b



3500 Å

7000 Å

Dalgaboyu →

9 Kadir

$V_r = 1000 \text{ km/sec}$

150 Mpc

500 million ly



Uzak kümede bir gökada

H & K

b



14 Kadir

$V_r = 10,000 \text{ km/sec}$

1500 Mpc

5 billion ly



Çok Uzak kümede bir gökada

H & K

b

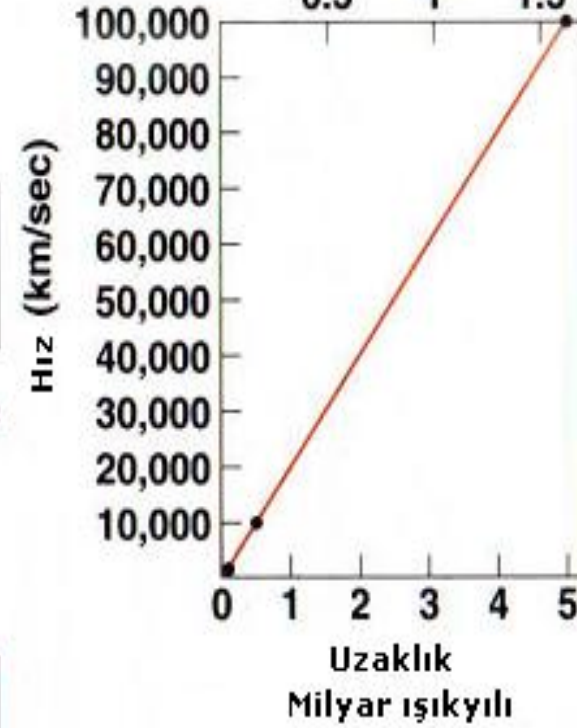


19 Kadir

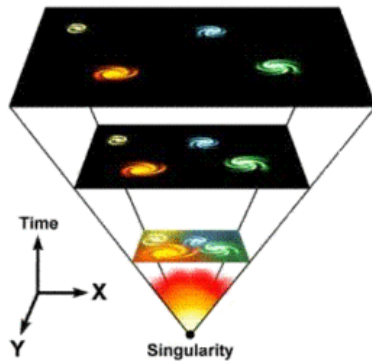
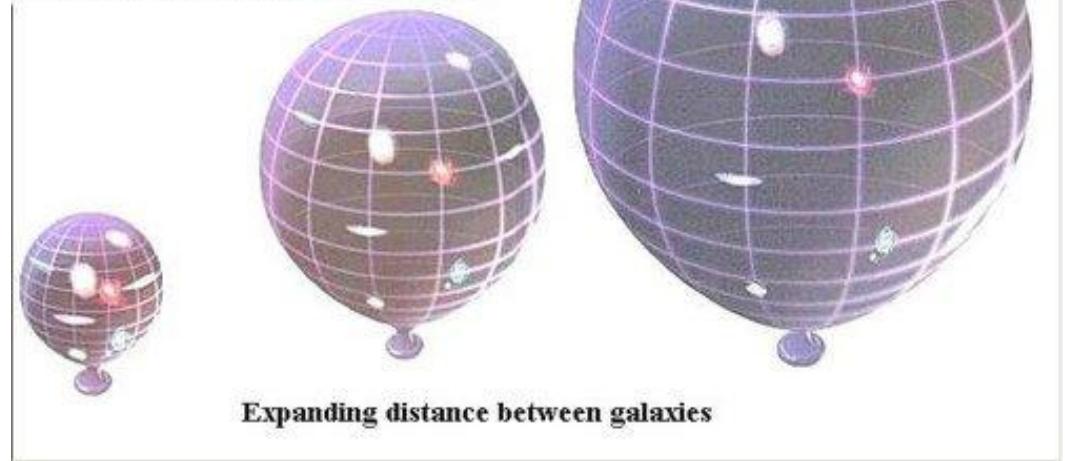
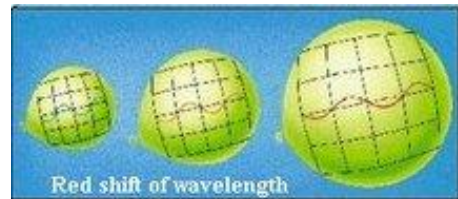
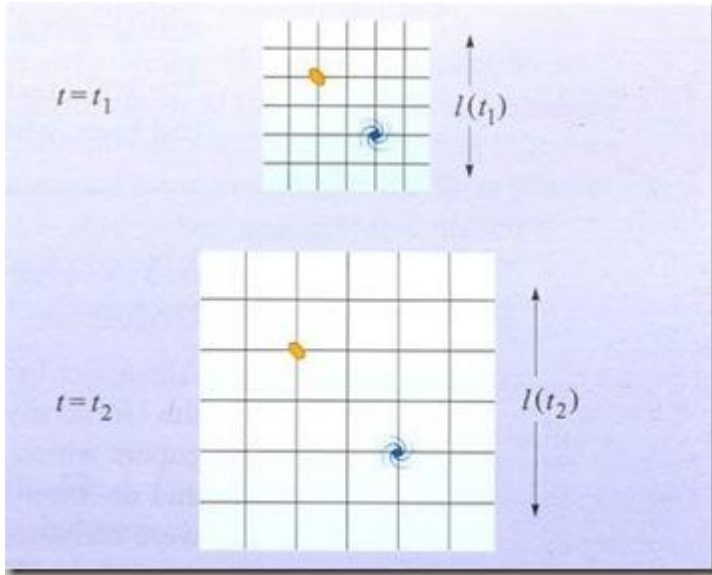
$V_r = 100,000 \text{ km/sec}$

Uzaklık
Milyar parsec

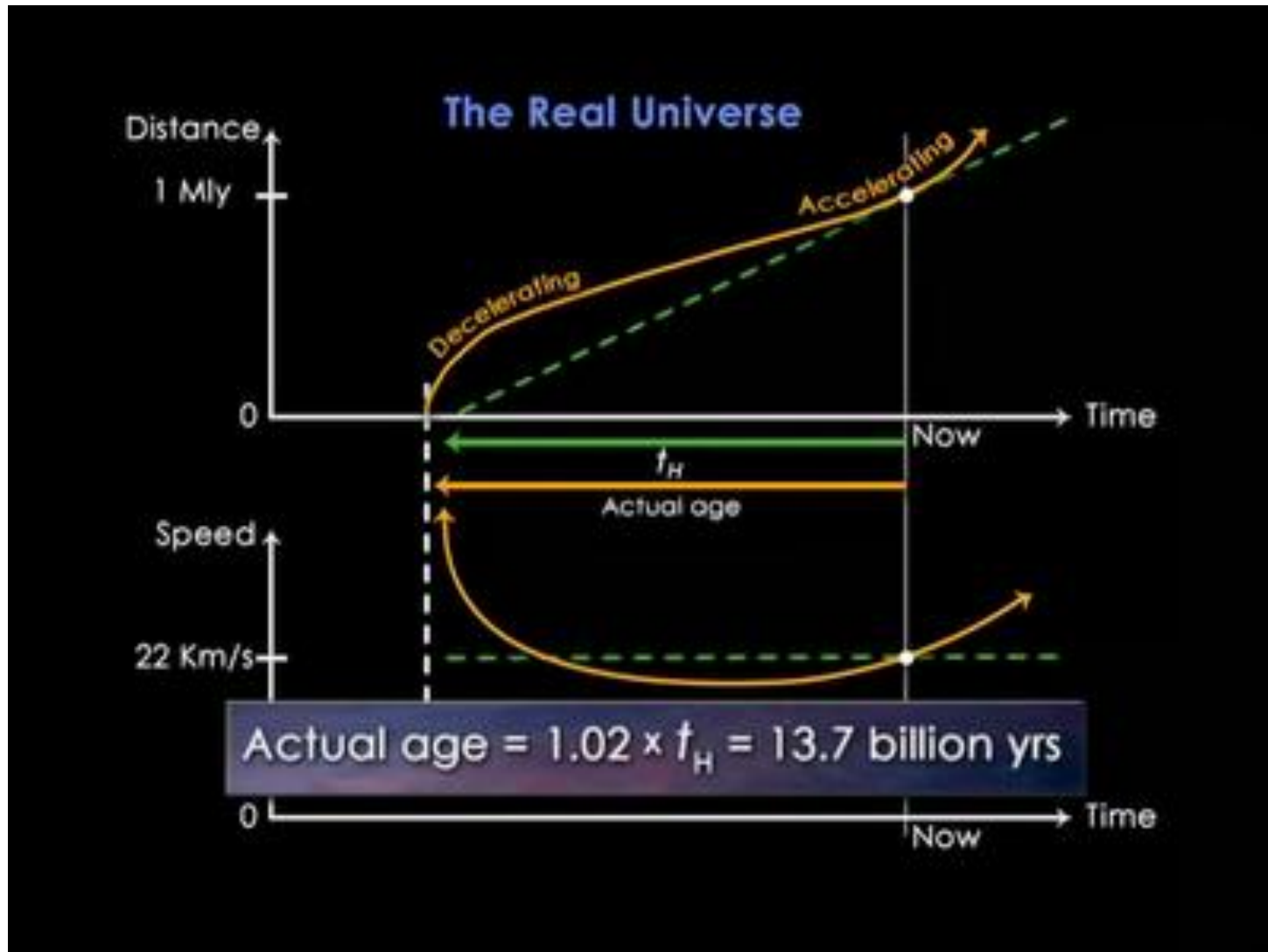
0.5 1 1.5

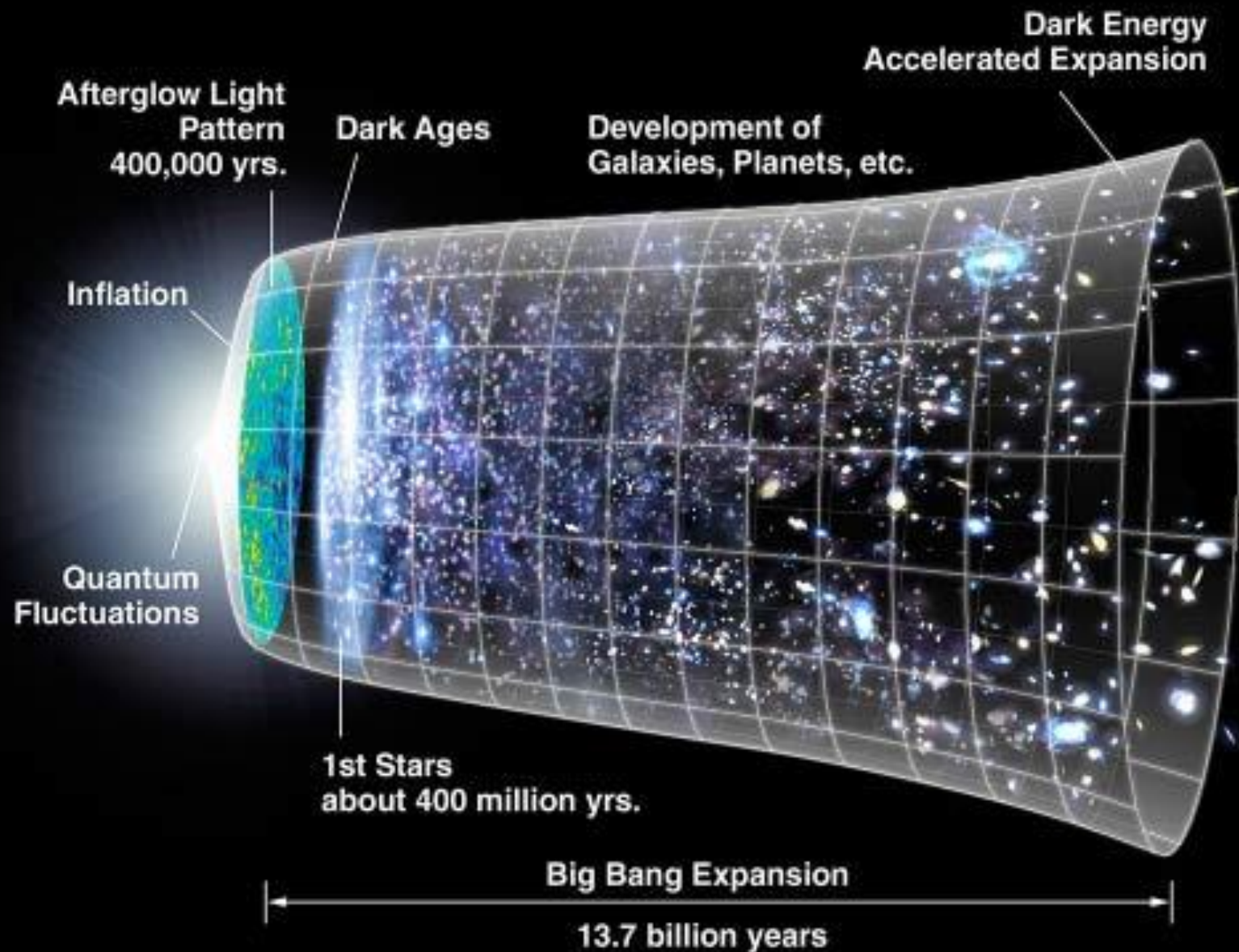


Genişleyen Evren

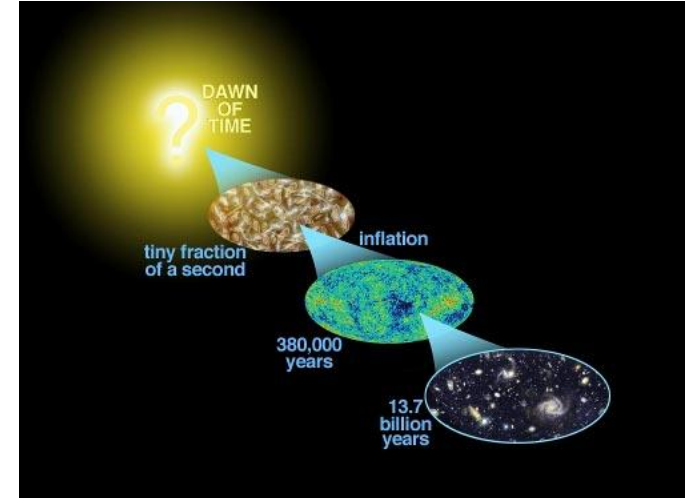
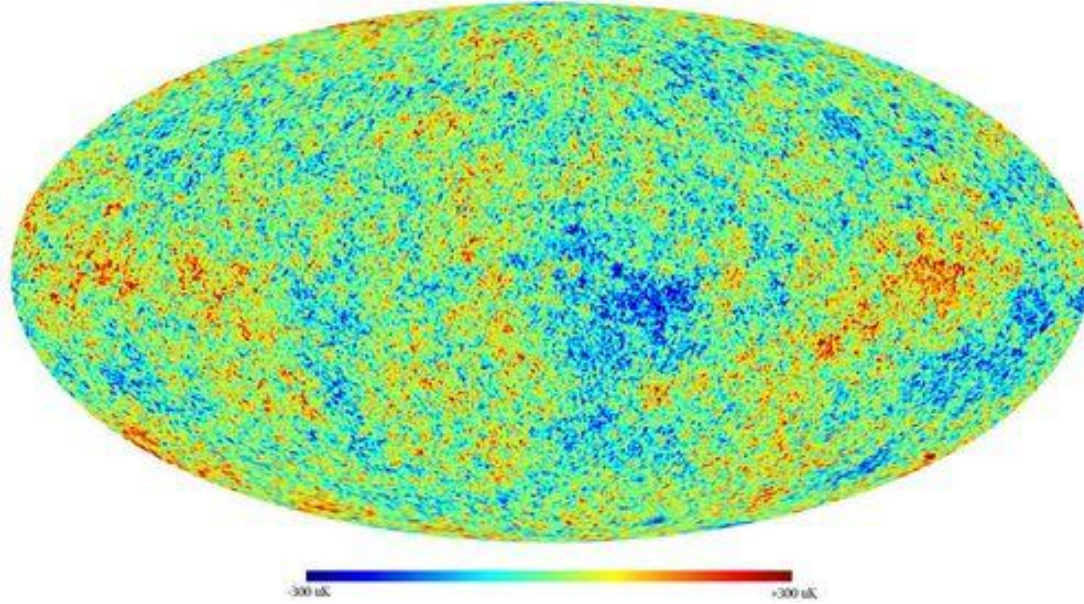


Evrenin Yaşı

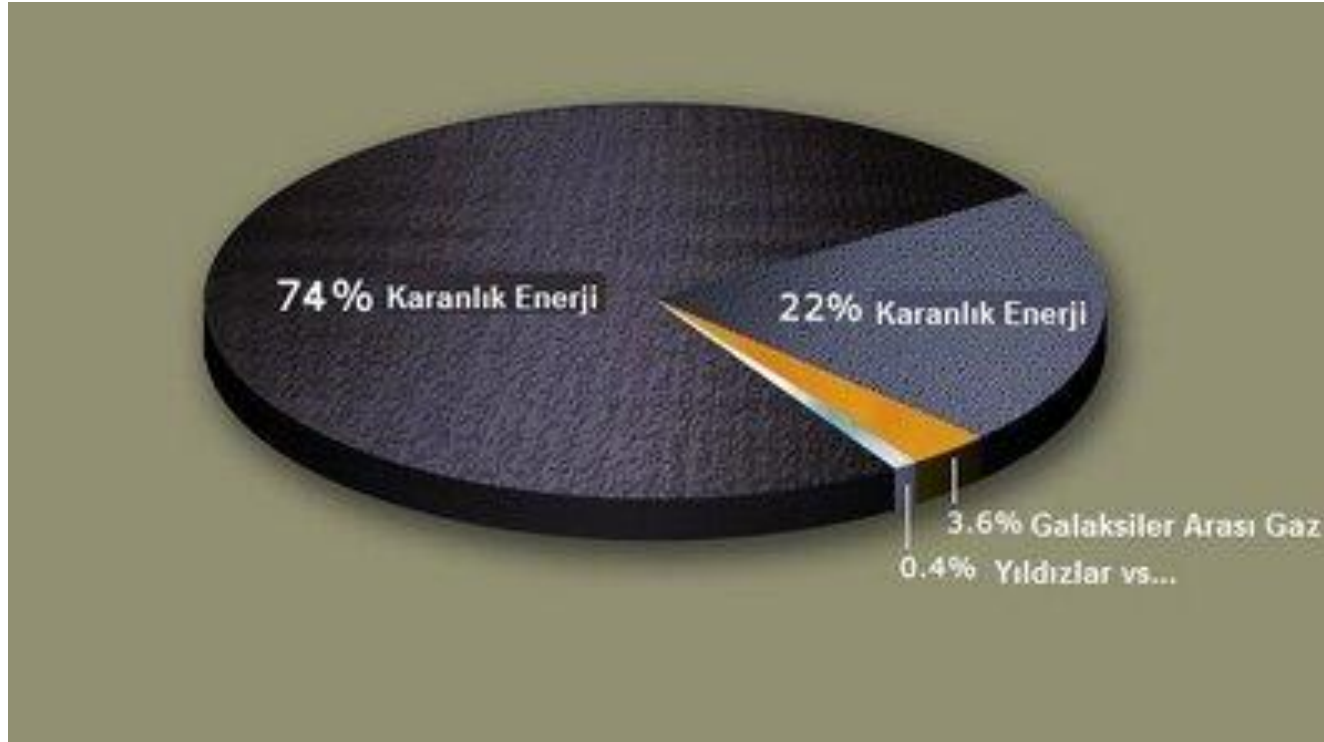




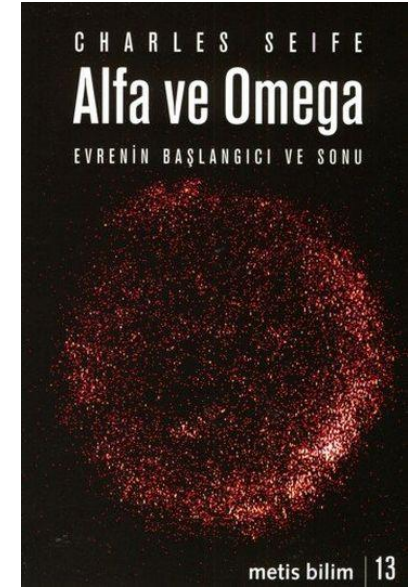
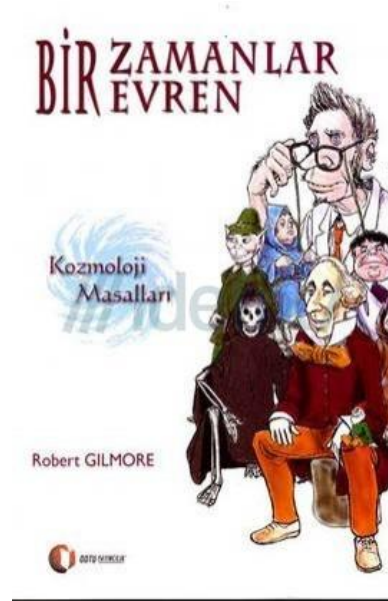
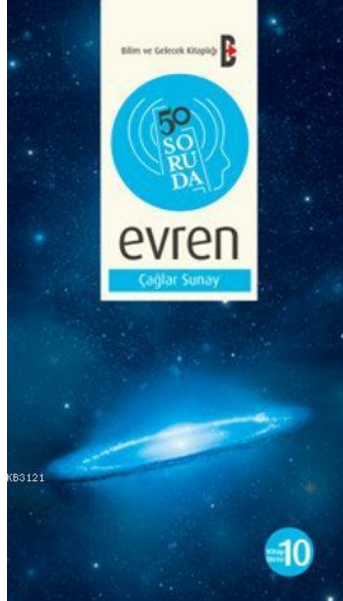
Evrenin İlk Fotoğrafi



Evrenin İeriđi



Kaynaklar



- 50 Soruda Evren – Bilim ve Gelecek Kitaplığı
- Bir Zamanlar Evren – Robert Gilmore
- 50 Soruda Büyük Patlama – Bilim ve Gelecek Kitaplığı
- Alfa ve Omega – Metis Yay.