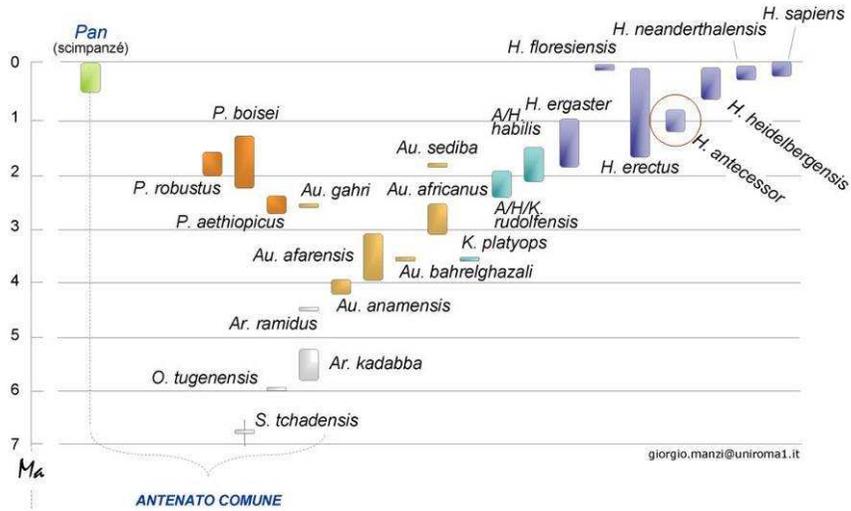
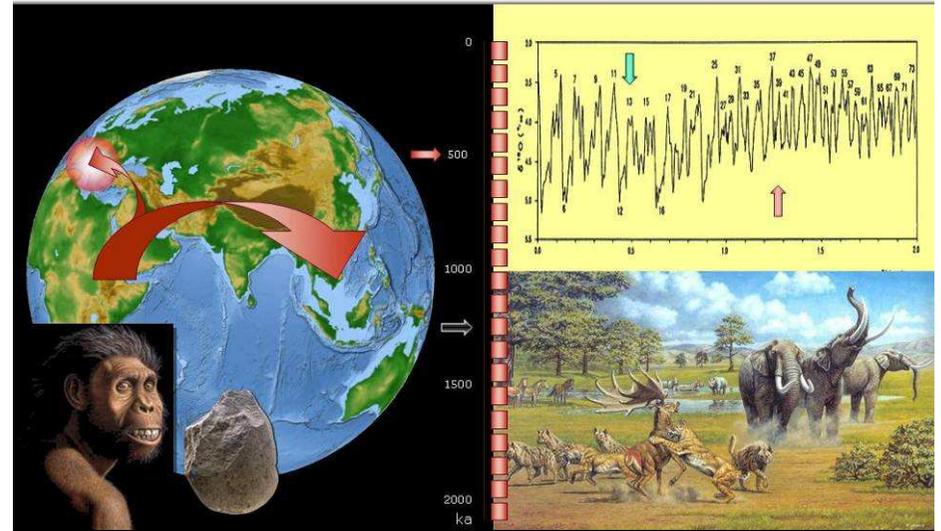


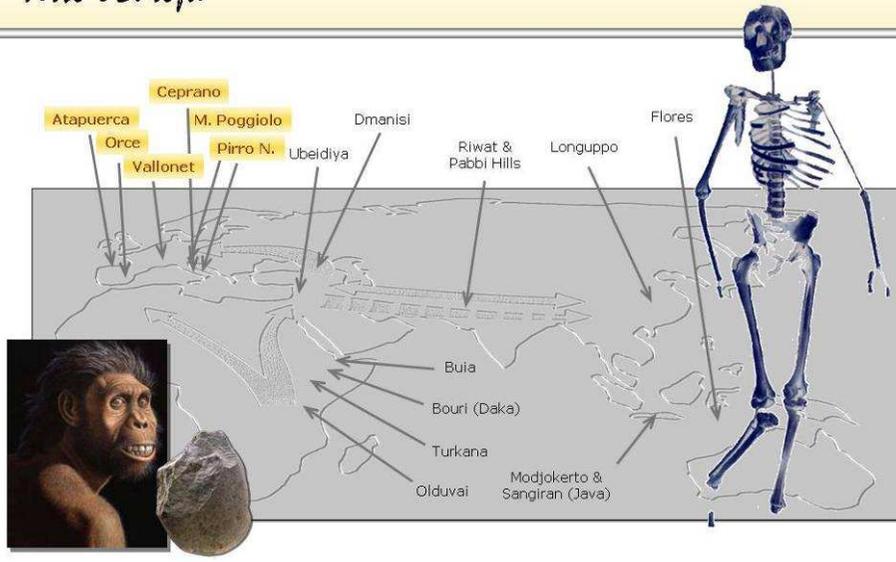
# Homo antecessor



# La nuova frontiera

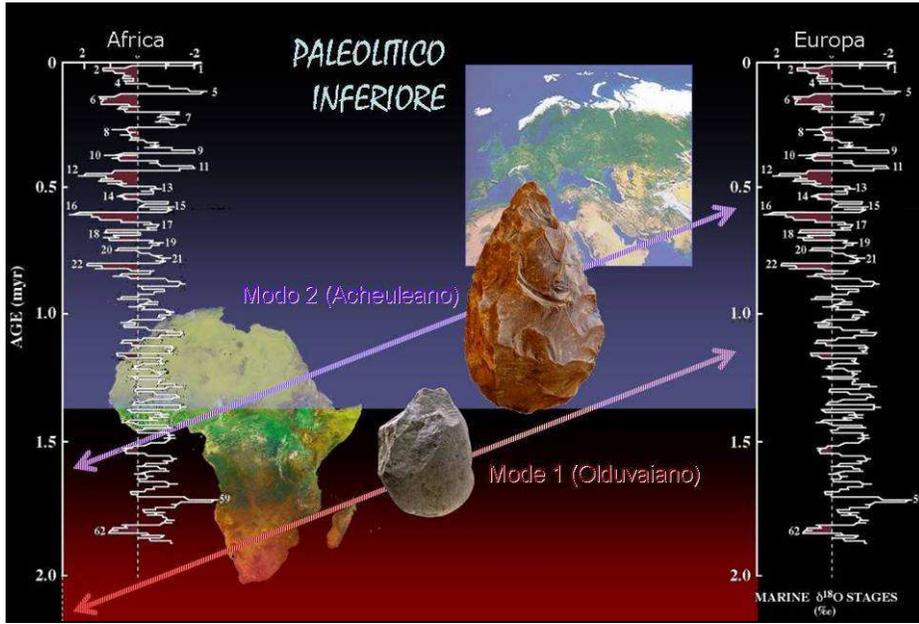


# Verso l'Europa

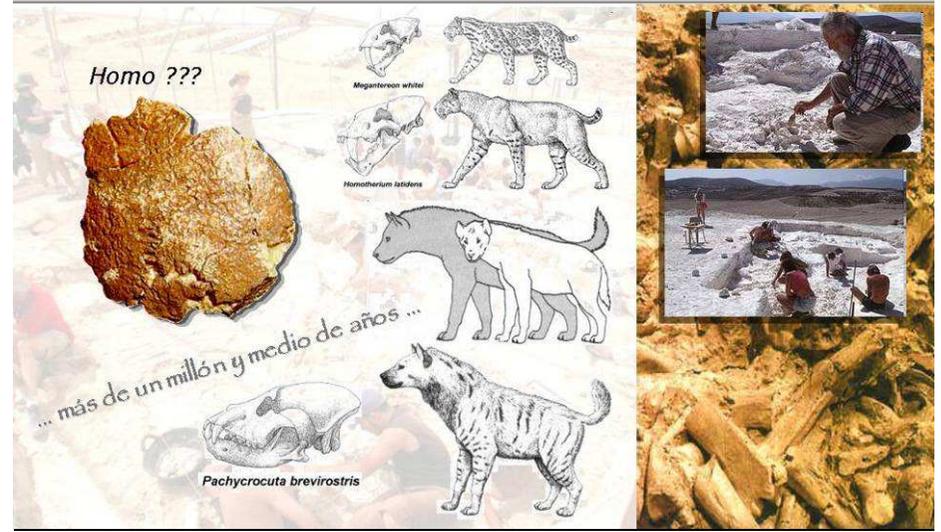


# Successione o contemporaneità ...?!

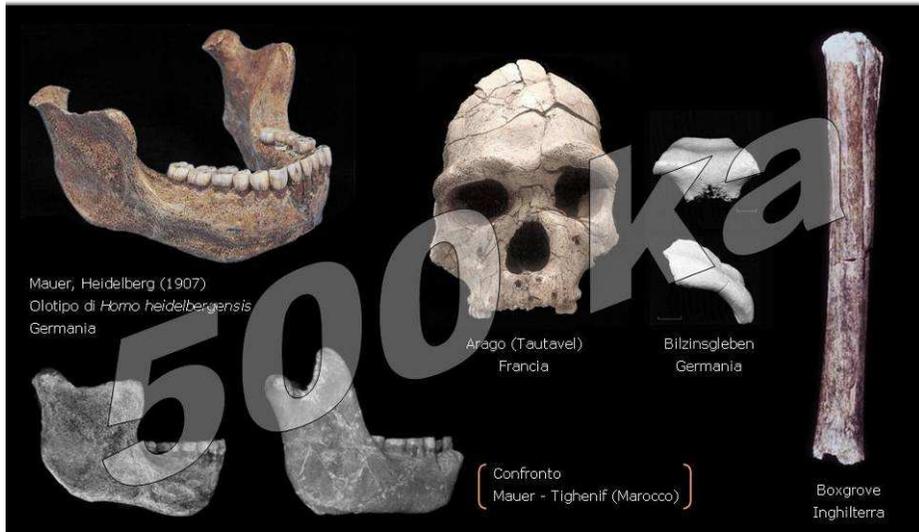




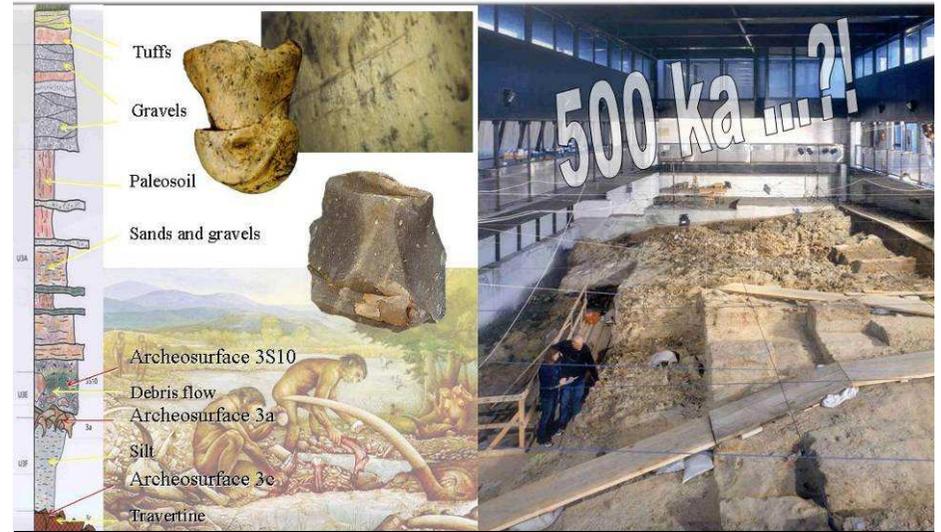
### Venta Micena (Orce, Granada)



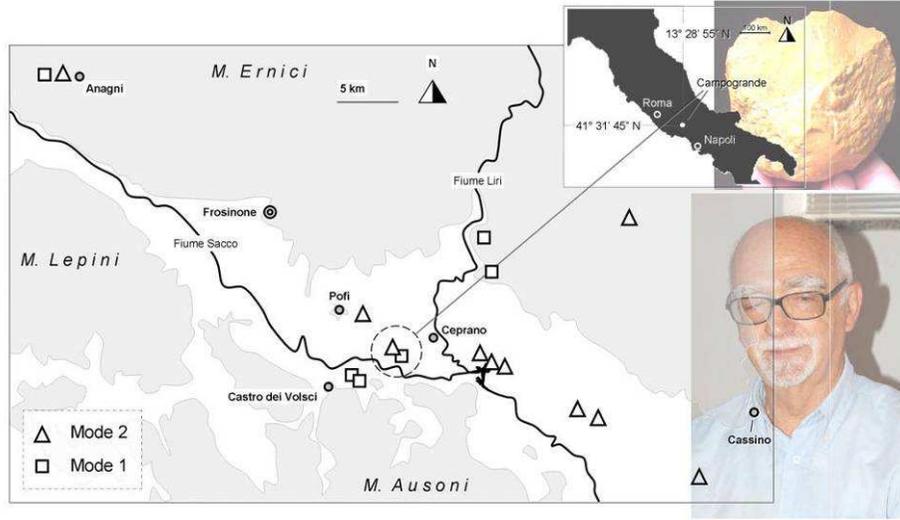
### Short chronology (1993)



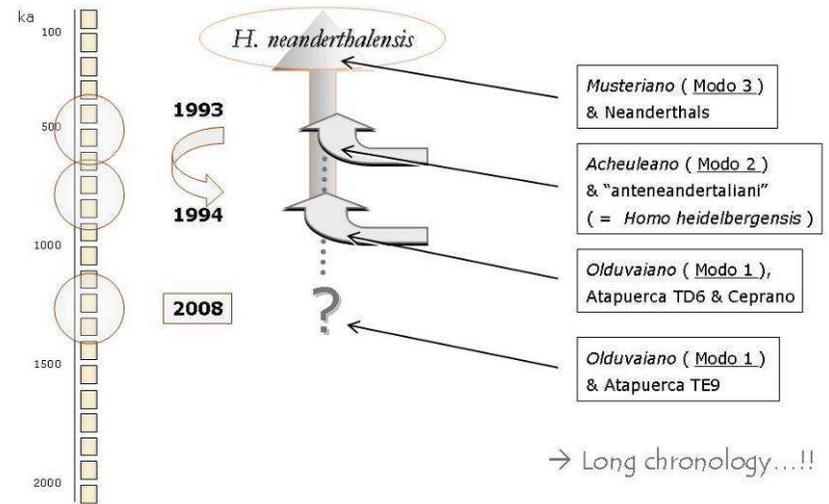
### Isernia - La Pineta (Molise)



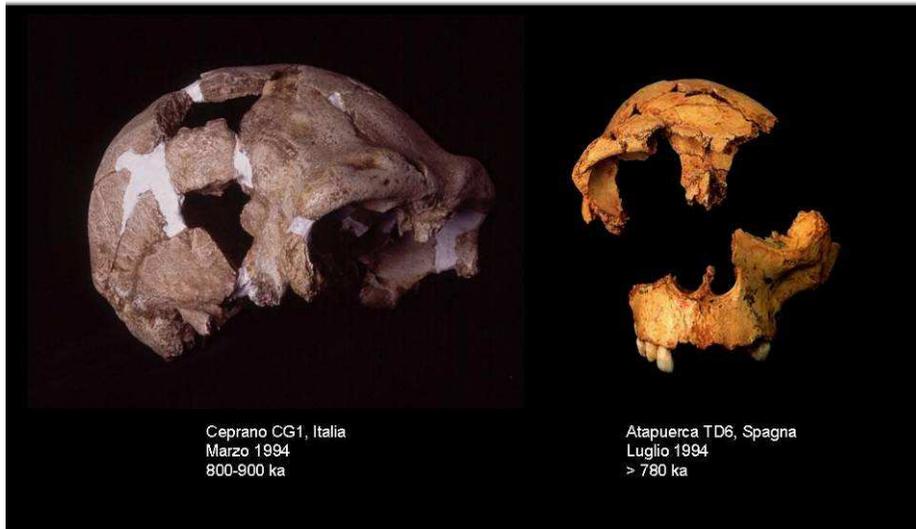
## Colle Marino, Arce, Fontana Liri ecc.



## Da 500 ka a 800 ka e ... oltre



## La volta del 1994



## Riassumendo (marzo 2008)

Archaeol. Site	Local.	Geolog. setting	Age in Myr (Post quem - Ante quem) [Direct dating]	Method	Lithic Ind.	Fauna	Hom. Fossils
Pirro Nord <sup>S20</sup>	Italy	Karst infilling	<i>L. Pleistocene</i> (1.7 - 1.3)	BS	Mode 1	Y	N
Sima del Elefante TE9 <sup>S26</sup> and this work	Spain	Karst infilling	[1.2]	PM,CN,BS	Mode 1	Y	Y
Barranco León <sup>S31,32</sup>	Spain	Fluvio-lacustrine	<i>L. Pleistocene - Matuyama</i> (1.3-1.2)	PM BS	Mode 1	Y	N
Fuente Nueva 3 <sup>S31,32</sup>	Spain	Fluvio-lacustrine	<i>L. Pleistocene - Matuyama</i> (1.2)	PM BS	Mode 1	Y	N
Pont-de-Lavaud <sup>S33</sup>	France	Alluvial	[1.1]	ESR	Mode 1	N	N
Le Vallonet <sup>S34</sup>	France	Karst infilling	(1.07 - 0.98)	ESR,PM,BS	Mode 1	Y	N
Soleilhac <sup>S35</sup>	France	Maar	(1.07 - 0.6)	Ar/Ar,PM,BS	Mode 1	Y	N
Sima del Elefante TE16-10 <sup>S26</sup>	Spain	Karst infilling	(1.2 - 1.07)	PM,BS	Mode 1	Y	N
Monte Poggiolo <sup>S36</sup>	Italy	Alluvial	[0.9]	PM,ESR	Mode 1	N	N
Gran Dolina TD4 <sup>S37,38</sup>	Spain	Karst infilling	>0.8	U/ESR,PM,BS	Mode 1	Y	N
Ceprano <sup>S39</sup>	Italy	Marsh	(1.0 - 0.7)	K/Ar,PM	No	N	Y
Gran Dolina TD6 <sup>S37,38</sup>	Spain	Karst infilling	[0.8]	U/ESR,PM,BS	Mode 1	Y	Y

# Pirro Nord (Apricena)

2005: un primo "nucleo"

Pachycrocuta brevirostris

PU 102.505

# Sierra de Atapuerca (Burgos)

Gran Dolina  
Galería  
TRINCHERA DEL FERROCARRIL  
Sima del Elefante  
CUEVA MAYOR  
Sima de los Huesos

0 50 100 m

# Quadix-Baza (Granada)

Barranco Leon

Fuente Nueva-3

VGP Latitude

0 1 Km

Orce

Fuente Nueva

Holocene

Recent alluvium

Pleistocene

Pliocene

dark coloured mudstones

light coloured silts and mudstones

sandstones

white calcareous silts

limestones

gravels

lithic artefacts

paleomagnetic site

mammals site

# Atapuerca - Sima del Elefante

Lithostratigraphy

Magnetostatigraphy

VGP Lat

Sima del Elefante

TE19

TE18

TE17

TE16

TE15

TE14-15

TE14

TE13

TE12

TE11

TE10

TE9

TE8

TE7

Bedrock

Coemogenic burial age

$1.13 \pm 0.19$  Myr

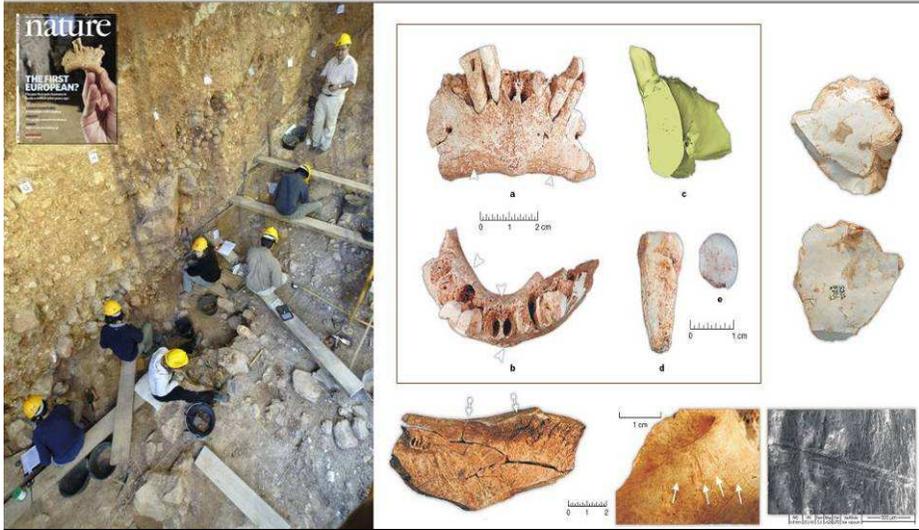
Coemogenic burial age

$>0.78$  Myr

$1.22 \pm 0.10$  Myr

Malyama chronology

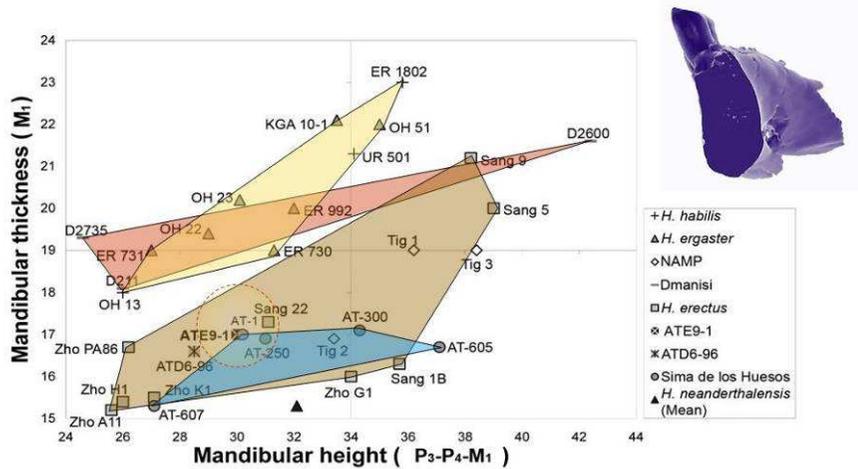
# Il più antico Europeo



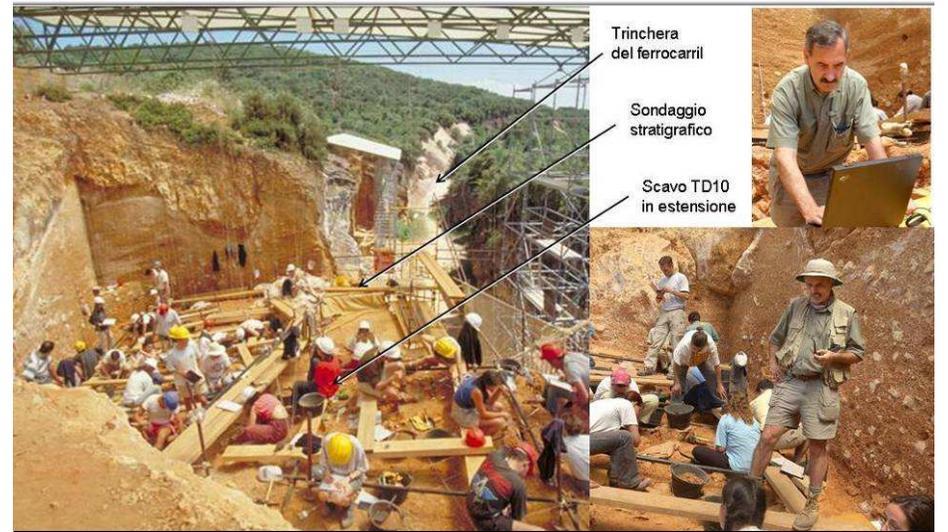
# Sierra de Atapuerca (Burgos)



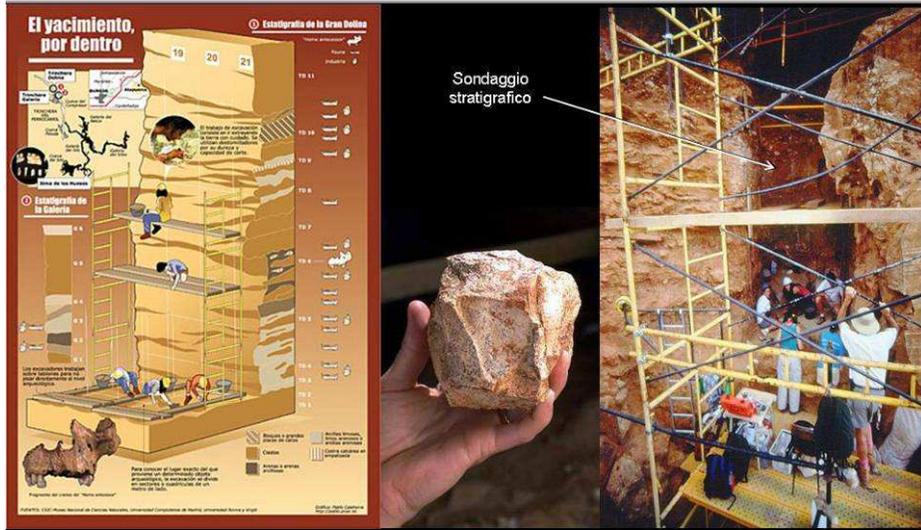
# ATE9-1



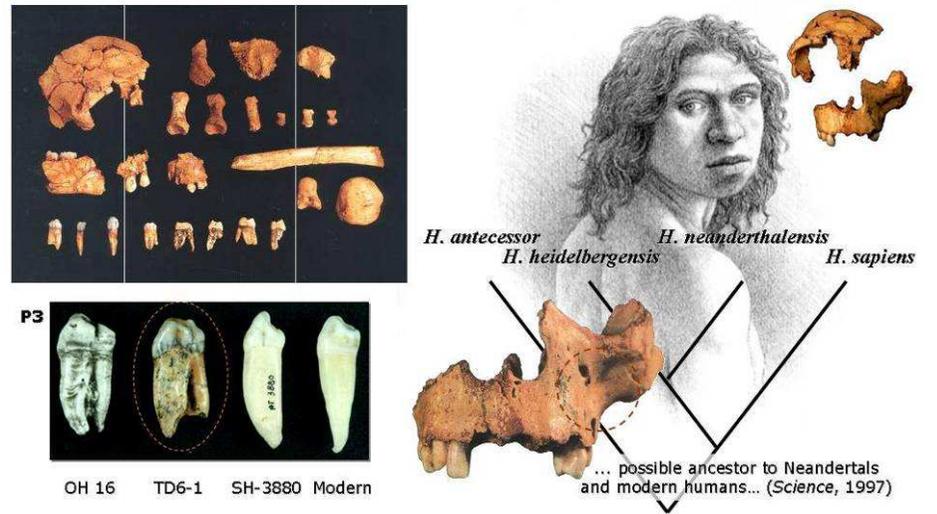
# Atapuerca - Gran Dolina (TD)



# Atapuerca TDS (1994)



# Homo antecessor



# Livello TDS, strato Aurora



# Il genere Homo

