

# حياة النجوم من ولادتها وحتى موتها

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(1)

(protostar)

(1 )

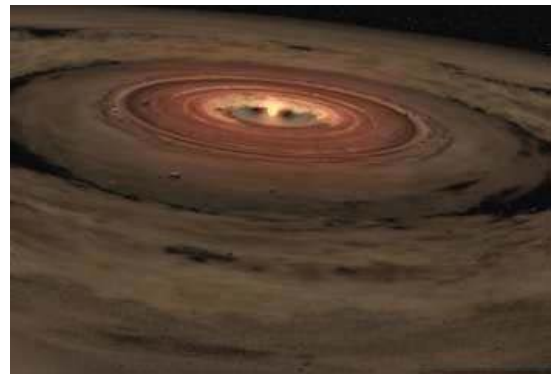
(2 )

(3 )



NGC3606

(3)



(2)

:

(main sequence star)

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10,000

10

.( )

:

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2

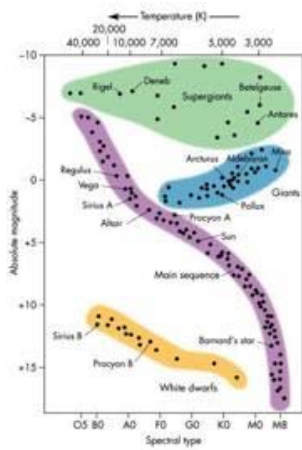
3500

2000

(red giant)

(4)

100



:(4)

4-0.4

)

(

(electron degenerate)

H-R .(white dwarf)

0.8 : .(4 )

0.01 ( 1.4 )

.( ) 15000 11+



:(5)

(planetary nebula)

.(5 )

(black dwarf)

3

7



:(6)

.(6 )

:

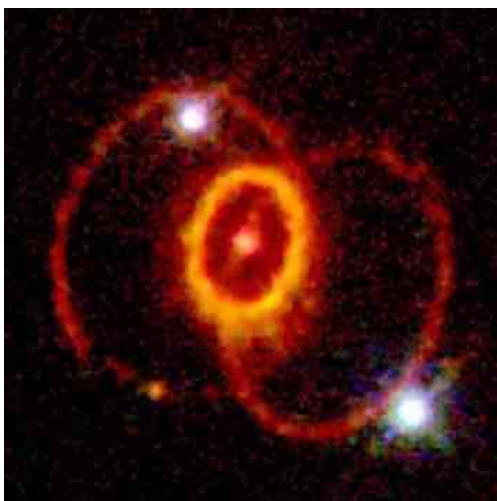
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4

(red supergiant)

(supernova)

(7 )



( )

:(7)

.2005

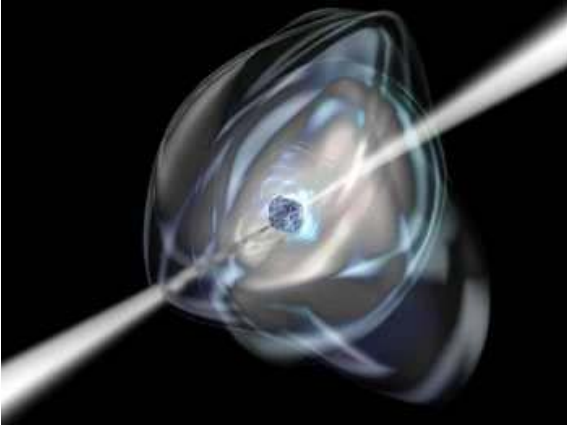
1987

10-4

(neutron degeneration)

( 20 )

( )



:(8)

(8 ) (pulsar)

30-10

3

(singularity)

(Chandrasekhar limit)

1.4

1.4

3 1.4

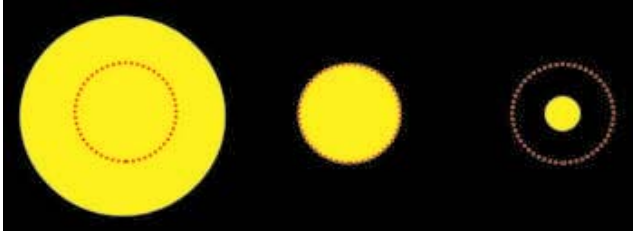
3

4

0.4

%10

3



(Schwarzschild limit)

:(9)

( )

( )

( )

event )

.(9 )

(horizon

10

:(10)

