

XXXXXXXXXX

XXXXXXXXXX  .X

XXXXXXXXXX  .X.X

XXXXXXXXXX  .X.X

XXXXXXXXXX  .X.X

XXXXXXXXXX  .X

XXXXXXXXXX

XXXXXXXXXX 

XXXXXXXXXX .X

XXXXXXXXXX .X.X

XXXXXXXXXX .X.X

XXXXXXXXXX .X.X

XXXXXXXXXX .X.X

XXXXX .X.X

XXXXXXXXXX .X.X.X

<<XXXXXXXXXX>> .X.X.X

XXXXX  XXXXX .X

XXXXXXXXXX .X.X

XXXX  .X.X.X

XXXXXXXXXX .X

XXXXXXXXXX

[/https://ir.cosmicphilosophy.org/timescape-theory](https://ir.cosmicphilosophy.org/timescape-theory)

.x x x x

x x x x x x x x x x x x x x x x

x x x x x x x x x x

x x x x x x

x x

x x

x x x x



x x

<< x >>

x x CosmicPhilosophy.org  x x

x x

x x

x x

x x

x x

x x

x x

x x

x x

.x x x x x x x x x x x x x x x x

XXXXXXXX XX :<XXXXXXXX XX XX> XXXXXXX XXXXXXX (2024)

XXXXXXXXXX XXXX XX XXXXXXX XXXXXXX XXXXXXX

□□ □□□□ □□□□ □□ □□□□□□ :□□□□ □□□□□□ □□□□□□ □□□□□□□□□□ | Phys.org :□□□□
L55-L60 □□□□□ □□□□□ □□□□□

▶ XXXXXXX XX XXXXXXX XXXXXXX XXXXXXX XXXXXXX XXXXXXX
XXXXXXXX XXXX ~ XXXXXXX

▶ XXXXXXX XX - XX XX XXXXXXX XXXXXXX XXXXXXX XXXX
XXXXXXXXXX ~ XXXXXXXXXX XXXX XXXXXXXXXX XXXXXXXXXX

▶ XXXXXXXXXX XXXXXXX XX XXXXXXX XXXXXXX XXXXXXX XXXXXXX
XXXXXXXXXXXX ~ XXXXXXXXXX XXXX XXXXXXXXXX

▶ XXXXXXXXXX XXXXXXXXXX :<XXXXX XXXXXXXXXX>
XXXX XXXXXXX XXXXXXX XX XXXXXXXXXX XX XXXXXXXXXX
XXXXXXXXXXXX XXXXXXX ~ XXXXXXX

XXXXXX XXXXX XXXXX XXXXX XXXXX



XX XXXX XXXXXXX XXXXXXX XXXXXXXXXX XX

XXXXXXXX XXXXXXXXXX XXXXXXXXXX

XXXXXXXXXXXXXXX XXXXXXXXXX :XXXXX XXXXXXXXXX

XXXXXX .XX XXXXXXX XXXXXXXXXX XXXXXXXXXX

XX XXXXXXX - XXXX XXXXXXX XXXXXXXXXX XXXXXXXXXX

XXXXXXXXXXXX XXXXXXXXXX .XX XXXXXXX XXXXXXXXXX XXXXXXXXXX

XXXXXXXXXXXX XXXXXXX <XXXXXXXXXXXX XXXX> XXXX XX XXXXXXX

XX XXXXXXXXXX XXXXXXXXXX XXXXXXX XXXXXXXXXX XXXXXXXXXX

XX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XX XXXXXXX <XXXX>

.XXXX XXXXXXX XXXXXXXXXX XXXXXXXXXX XX XXXXXXX XXXXXXXXXX

XXXXXXXXXX XXXXXXXXXX XXXX XXXXXXX XXXXXXXXXX XXXXXXXXXX

XXXXXXXXXXXX XXXXXXXXXX XXXXXXX XXXXXXXXXX XX XXXXXXXXXX

XXXXXX XXXXXXXXXX XXXXXXXXXX XXXX XXXXXXXXXX XXXXXXXXXX

.XXXXXXXX XXXXXXXXXX XX XXXXXXX

XXXXXXXXXXXXXXXX <XXXXXXXXXXXXXXXXXXXX> XXXXXXX XXXXXXX
XXXXXXXX XXXXXXX XXXXXXX XXXXXXX XXXXXXX XXXXXXX XXXXXXX
XXXXX XXXX XXXXXXX ● XXXXX XXXXXXX XXXXXXX XXX XXXXXXX
XXXX XXXX XXXXXXX XXXXXXX XXX XXX XXX XXXXXXX XXX
.XXXXXX

XXXXX <XXXXXXXXXXXXXXXXXXXX> XXXXXXX XXXXXXX XXX XXXXXXX
XXXXXXXX XXXX <XXXXX XXXX XXXXXXX> XXXXXXX XXXXXXX
XX
:XXXXXX XXXX XX

XX .1
XXXXX XXXXXXX XXXXXXX XXX XXX XXXXXXX X Λ CDM
XX
.XXXXXXXXXX XXXXX XXX XX

● XXX XXXXXXX XXXXXXX XXXXXXX XXXXXXX XXXXXXX .2
XXXXXXXXXX XXXXXXX XXXXXXX XXX XXXXXXX XXX XXXXXXX
XXXXXXXX XXXXXXX XXXXXXX XXXXXXX XXXXXXX XXX XXXXXXX
.XXXX XXXXXXX XXXXXXX XXX XXXXXXX <<XXXXXX>>

XXXX XXXXXXX XXXXXXX XXXXXXX XXXXXXX XXXXXXX .3
- XXXX XXXXXXX XXX XXXXXXX XXXXXXX XXXXXXX XXX - XXXXX
XXXXXXXX XXXXXXX XXXXXXX XXXXXXX XXX XXX XXX XXXXXXX
.XXXXXXXX XXXXXXX XXXXXXX XXXXXXX XXXXXXX XXX XXXXXXX

XX .4
XXXXXXXX XXXXXXX XXXXXXX XXXXXXX XXX XXXXXXX
XXXXXXXX XXX XXXXXXX XXXXXXX XXXXXXX XXXXXXX XXXXXXX
XXXXXXXX XXX XXX XXXXXXX XXXXXXX XXXXXXX XXXXXXX XXXXXXX

XXXXXXXXXX <<XXXXXXXX> XX XXXXXXXXXXXXXXXXXXXXXXXXXXXX

.XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

XXXX XX XXXXXX XXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXX

XXXX XX XXXXXXXXXX ● XXXXXXXXXXXXXXXXXXXXXXXXXXXX

XXXX XX XXXXXXXX XX XXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXX

XXXXXXXXXX XX XXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXX

XXXX XXXXXXXXX <XXXXXXXXXXXX> XX XX XXXXXXXX XXXXXXXX XX

XXXXXXXXXX XX

XXXXXXXXXXXX XXXXX XX XXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

XXXXXXXXXX XX

(XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX) XXXXXXX XX XXXXXXXX XXXXXXXX

- XXXXXXXXXXXXXXXXXXXXXXXXXXXX ⌚ XXXXXXX XXXXXXXXXXXXXXXXXXXX

XX XXXXXXX XXXXXXXXXXXXXXXXXXXX <<XXXX XXX XXXXXXXXXXXXXXX> XXXXX

.XXXXXXXXXXXX XXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXX <<XXXXXXXXXXXX>

<<XXXXXXXXXXXX XXXXX XXXXXXXXXXXXXXX> XXXXXXX XX XXXXXXXXXXXXXXXXXXXX

XXXXXXXXXX XXXXX XX

XXXXXXXX XX XXXXXXXXX <<XXXXXXXXXXXX XXXXXXXXXXX> XXXXXXX

.XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

XXXX XXXXXXXXXXXXXXXXXXX XXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXX

XX XXXXXXXX XXXXXXXXXXXXXXXXXXX <XXXXXXXXXXXX XXXXX> XXXXXXXX

∞ XXXXXXXXXXXXXXX > XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

.XXX <XXXXXXXXXXXX

XXXXXXXXXX XXXXXXX XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

.XXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

.X.X XXXXX



XX

XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

XX 2013 XXXXX XXX XXXXXXXXXXXXXXXXXXXXXXX

...XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

XXXXXXXXXX XX' XXXXXX XXXXXXXXXXXXXXXXXXXXXXX (2023)

<<XXXXXX

XX <XXXXXXXX' XX XX XXXXXXXXXXXXXXXXXXXXXXX

.XXXXXXXXXX XXXXXXX

□ □ □ □ : □ □ □ □

XX

XXXXXXXXXX XXXXXXX XXXXXXXXXXXXXXXXXXXXXXX

XX

XX

XXXXXXXX XXXXXXX XXXXXXXXXXXXXXXXXXXXXXX

XXX .XXX Space.com XX XXXXXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXX XX XXXXXXXXXXXXXXXXXXXXXXX

.XX

XXXXXXXXXX XX XXXXXXXXXXXXXXXXXXXXXXX > XXXXXXXXXXXXXXXXXXXXXXX

.XX

XX

XX XXXXXXX XX XXXXXXXXXXXXXXXXXXXXXXX

XX

XXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXX

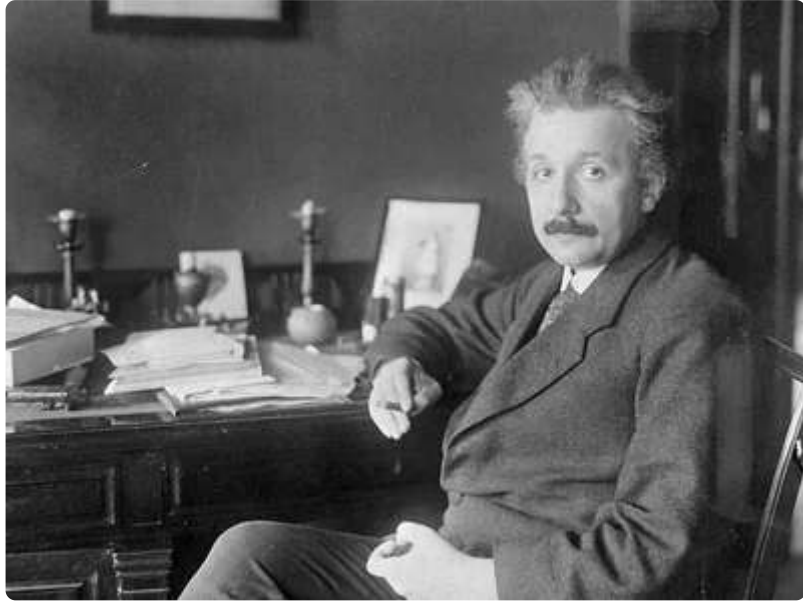
XXXX Space.com XXXXXXX XX - XXXXXXXXXXXXXXXXXXXXXXX

.XXXXXXXX XXXXXXX XXXXXXXXXXXXXXXXXXXXXXX

XXXX XXXXXXX XXXXXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXX

.x x x x



x x x x x x x x x x x x

x x

< x x x x x > x x x x x x

x x

x x

x x

x x

x x

x x (. x . x x x x) ● x

x x

. x

XXXXXXXXXX XXXXXXXXXXXX XXXXXXXXXXXX :1929

XXXXXXXXXX XXXXXXXXXXXX XXXXXXXXXXXX

XXXXXXXXXX XXXXXXXXXXXX XXXXXXXXXXXX XXXXXXXXXXXX 1929 XXXX XX

XXXXXXXXXX XXXXXXX XXX XXXXXXX XXXXXXX XXXXXXX XXXXXXX XXXXXXX

XX XX XXXXXXX XXXXXXX XXXXX XXXXXXX XX XXXXXXX XXXX

.XXXX XXXXXXX XXXXXXX XXXXXXX <XXXXXX>

XXXXX [XXXXXXXX] XXXXXXX XXXXXXX XX XXXXXXXX' (

XX XXXXXXX XXXXXXX XXX XXXXXXX XXXXXXX X XXXX

XXXX XXXXXXX XXXXXXX XXXX XX XXXXXXX XX XXXXXXX XXXX

<<.XXX

XX XXXXXXX XX 1929 XXXX XX XXXXXXX XX XXXXXXX XXXX

XXXXXXXXXX XXXXXXX XXX XXXXXXX XXXXXXX XXXXXXX XXXXXXX

<<XXXX XXXXXXX XXXXXXX> XXXXXXX XXXXXXX XXXXXXX XXXXXXX>

XXXXXXXXXX XXXX XX XXXXXXX XXXXXXX XXXXXXX XXXXXXX> XX

.XXXXXXXX XXXXXXX XXXXXXX <<XXXX

Springfield Daily News XXXXXXX XXXXXXX XXXXXXX

XX [XXXX] XXXXXXX XXXXXXX XXX XXXXXXX> :XX XXXX

XX XXXXXXX XXXX XXXX XXXXXXX XXXXXXX XXXXXXX XXXXXXX

<<.XXXX XXXXXXX XXX XXXXXXX XXXXXXX XXXXXXX XXXXXXX

.X.X XXXX

XXXXXXXXXX XXXXXXX XX :1931

xx xxxxxxxxxx xx xxxxxxxx xxxxxx xxxxxxxxxx xxxxxxxx
xxxxxxx xxxxxxxxxx xxxxxxxxxx xx xx xxxxxxxxxx
xxxxxx xxxxxxxx xxxxxx xxxxxxxxxx xxxxxx <xxxxxxx xxxxxxxx>
.xxxxxxx xx xx xxxxxxxxxx xxxx xx

xx [xxxxxxx] - xxxxxx xxxxxx xx xxx xxxxxx xx
xxxxxxxx xxxxxx xx xxxxxxxx xxxxxxxxxx xxxxxx xxxxxxxxxx
xxxxxx xxxxxxxxxx xxxxxxxxxx xxxxxx ... xxxxxx xxxxxxxxxx
xx xxxxxxxxxx xxxxxx xxx xxxxxx xxxxxxx xxxxxxxxxx
xxxxxxxx xx xxxxxxxxxx xxxxxxxxxx xxx xxx xxxxxxxxxx xxxxxx
.xxxxxxx xxx xx

.x.x xxxx

xxxxxxxx xxxxxxxxxx xxxxxxxxxx :1931

xxxxxxxxxxx

xxxxxxxx xx xxxxxxxxxx xxxxxxxxxx xxxxxxxxxx 1931 xxxxxx
xxxxxxx xxxxxxxxxx) «*Zum kosmologischen Problem*»
xx xxxxxx xxxxxxxxxx xxx xxx («xxxxxxxxxxxxxxx
xxxxxxxx xxxxxx xx xxxxxx xxxxxxxxxx xxx xxxxxx xxxxxxxxxx
xxxxxxxx xxxxxxxxxx xxxxxx xxxxxxxxxx xxx xxxxxxxxxx xxxxxx ∞
xxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxx xxx xxxxxx xxxxxxxxxx
xxxxxxxxxxx xx xxxxxxxxxx xxx xxxxxxxxxx xxxxxxxxxx xxx
xx <xxxxxxxx xxxxxxxxxx> xxxxxxxxxx xxxxxxxxxx xxxxxxxxxx
.xxxxx xxxxxxxxxx 1929 xxxxxx xx

× ×× ××××××× ××××××× ×××××× ×× ××××××× ××× ××
×××××××× ××× ××××× ×××××××× ×× 2013 ××× ××
××××××× ×× ××××× ×××××× ××× ×××××× ××××××
.×××× ××××× ××××× ×××××× ×× ××××××××

.×.× ×××

×× ×× ×××××××× ×××××× ×××××× :1932

×××××



××× ××××××× ×× ×× ×××
×× ××××××× ××××××××
××××××× ×××××× ×× ××××××
××××× × ××× ×××××× ×××××
×××××× ×× ×××××× ××× <××××××>
×× ××××× ×× ×××××××× ××××× ××
×× ××××××× ××××××× ××××××
×××××××× ××××××× ××××××××××
.×××× ××××× ××××××××

×× ×××××××× ×× ×××××× ××× ××××× ××××× ×× ××

××××× ×××××××× ×1933 ××××××× ×× ××××××××××

× ×× ×× ×××××××× ×× - ×××× ×××××× ××××××

× ××××××××× ××××> :×××× ×××××× ××××××××

×× ×××× ×××××××× ×××××× ××××××××××××

××××× ×× ×××× ×××××× ×× × <<.×××××××× ××××××

×××××× ×××××××× ×××××××××× ××××××××× ∞ ××××××

.×××××× ×××× ×××××××

XXXXXXXXXX XXXXXX XXXXXXXXXXXX XXXXXXXXXXX XXXXXXXX XX XXX XXXXXXXX
XXXXXXXXXX XXXXXXXXXXXXX XXXXXXXXXXXXX XXXXX XX XXXXXXXXXXXXX
XX XXXXXX XXXXXXXXXXX XX XXXX XXXXXXXXXXXXX <XXXXXXXX XXXXXXXX>
XXXXXXXXXXXX XX XXXXXXXXXXXXX XXXXXXX XXX XXXXXXXX XX XXXXXXXX
XXXXXXXXXXXX

XXXXXXXX XX XXXXXXXXXXX XXXXXXX XXXXXXXXXXXXX XXXXXXXX XXXXXXXX
XXXXXXXXXXXX XXXXXXXXXXXXX XXXXXXXX

.X.XXXXX

XXXX

XXXXXXXXXX XXXXXX XX XXXX XXXXXXXXXXX XXXXXXXXXXXXX XXXXXXXX XXXXX
XXXXXXXXXXXX XXXXX <<XXXXXXXXXXXX XXXXXXXXXXXXXXX> XXXXXXXXXXXXXXX ∞
<XXXXXX 🕒 XXXXXXX> XXXXXXXXXXXXXXX XXXXXXXXXXX XXXXXXXX XXXXXXXX
XXXXXXXXXXXXXXXXXXXX XXXXXXX

XXXXXXXXXXXX XXXXXXXXXXX XXXXXXXXXXX XXXXXXXXXXX XXXXXXXX XXXXXXXX
XXXXXXXX XXXXXXXXXXX XXXXXXXXXXXXXXX XXXXXXX XXXXXXXXXXX XXXXX XXXXXXXX
XXXXXXXX XXXXXXXXXXX XXXXX XXXXXXX XXXXXXXXXXXXXXX XXXXXXX XXXXXXXX
<<XXXXXXXX XXXXX XXXXXXX XXXXXXXXXXXXXXX> XX XXXXXXXXXXXXXXX
XX XX XXXXXXX XXXXXXX XXXXX XXXXXXXXXXXXXXX XXXXXXXXXXX XXX XXXXXXX

 XXX XXXXXXXX  XXXXXXXXXXX XXX XXXXXXXX

.XXXX XXXX XXXXXXXX GMODebate.org

XX XXXXXXXXXXXXX XX XXXXXXXXXXX XXXXXXXXXXXXXXX XXXXXXXXXXXXXXX XXXXX
XXXXXXXXXXXXXXXX XXX XXXXXXXXXXXXXXX XXXXXXXXXXX XXXXXXXX XXXXXXXX
XXXXXXXXXXXX

×× ×××××× ××× ×× ××××× ××××××× ×××
×××××× ×××××× ××× ×××××××× ××××××× ××××××
××××××

×××× ××××××× ××××× ×××××××× ×× ×××
××××××× ××× ×××××× ××××× ×× ×××× ××××××××
××××× ××××××

□□□□□ □□□□ □□□□□ □□□□□ :□□□□

×××××× ×× <××××××××× ∞ × ××××××××> ××××××
×× ×××××× ×××× ×××××××× .×× ×××××× ××××××××
×××××× ×××××× ×× <××××× ××××××××× ××××> ××××××
.×× ××××××× ××××××××

×××××××× ∞ × ×××××××× (2020)


□□□□□□ □□□□ □□□ □□ □□□□□ | □□□□□□□ □□□□□ | □□□□□ □□□ □□□□□□ □□□□□ :□□□□

CosmicPhilosophy.org

[/https://ir.cosmicphilosophy.org](https://ir.cosmicphilosophy.org)

XXXXXXXXXXXXXXXXXXXX

:XX XXXXXX XXXXXXXXXXXX

- ▶ XXXXX XXXXXX XX XX XXXXXXXXXXXX :GMODebate.org 
- XXXXXXXXXX >> XXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
- XXXXXXXX X <<XXXX XX>> XXXXXXX X<<XXXXXXXX XX XXXX
- .XXXXXXXXXXXX XXXXXX XXXXXXXXXXX XXXXXXX XXXXX