



XXXXXXXXXX XXXX XXXXXXXX?

XXXXXX, XXXXXXXXXXXXXXXX XXXX
XXXXXXXXXXXXXXXXXXXXXXXX. XXXX
XXXXXX.

XXXXXXXXXXXX

1. XXXXXXXXXX XXXX XXXXXXXX?

1.1. XXXX XXXXXX 101: XXXXXXXX XXX XXXXXXXXXXXXXXXX

1.2. XXX XXXXXXXX XXXXXX XXXX

1.3. XXXXXXXXXXXX: “XXXXXXXXXXXX XXXXXXXX”

1.3.1. XXXXXXX XXXXXXX: XXXXXXXXXXXXXXX XXXXXXXXXXXXXXX
XXXXXXXXXX

1.3.2. XXXXXXX XXXXXXX XXXXXXX: XXXXXXXXXXXXXXX XXXXXXXXXXXXXXX
XXXXXX XXXXXXXXXXXXXXX

1.4. XXXXXXXXXXX “XXXX” XXXXXXX XXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX

1.5. XXXXX XXXXXXXXXXXXXXX XXXX

2. XXXXXXX

× × × × × × × × × 1.

✕ ✕ ✕ ✕ ✕ ✕ ✕ ✕ ✕ ✕ ✕

XXXXXX?

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)

XXXXX,

2025- ,

X X X X X X X X X X X X X X X X X X X X X X —

Physics World Science Daily

— XXXXXXXXXXXXXXXXXX

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

"XX"

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.XXXXXXXXXX XXXXXXXXXXXXXXXX LHCb

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

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 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



XXXXXXXXXXXXXXXX XXXXXXXXXXX XXX XXXXXXXXXXX XXXXXXXXXXX XXXXXXX
XX.
XXXXXXXXXXXXXXXX XXXXXXXXXXX, XXXXX XXXXXXXXXXX
XX
XXXXXXXXXXXXXXXXXXXXXXXXXXXX, XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXX XXXXXXXXXXXXX ‘XXXXXX’ XXXXX XXXXXXXXXXXXXXXXXXXX;
XXXXXXXXXX XXX
XX
XXXXXX XXXXXXXXXXX XXX
XX.
XX

XXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX “XXXXXXXXXXXXXXXXXXXXXXXXXXXX”
XXXXXXXXXXXX XXX, XXXXXXXXXXX XXX
XXXXXXXXXX XXX: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XX,
XX
XX
XX XXXXXXXXXXXXXXX XXXXXXXXXXXXXXX
XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX XXX.

XXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX: XXXXXXXXXXXXXXX
XX
XX
XXXXXXX, XXX-XXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX XXX XXXXXXXXXXXXXXX,
XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXX
XX; XXXX XXXXXXX XXXXXXXXXXXXXXX XXXXXXXXXXXXXXX
XX.

× ×× ×× ×× × ×× 1.1.

×××× ××××× 101: ××××××× ×××

×××××××××××××

×××××××××××× ××××××××× ××××××××××××××××,
×××× ××××× ×××××××××××××××× “×××” ××××
×××××××××××× ×××××××× ××××××××××××××××
××××××× ××××××× ××××××××××××××××× ×××××××××.

××××××××××××, C ××××××× ××××××××××× ×××××
××××××××× ××××××××××××; ××× ××××××××××××××
××××××××××××× ×××××××× ×××××××××
××××××××××××××××××××××××× ×××××××××
××××××××××××× ××××××××××××: ×××××××××××××, ×××
×××××××××××××, ××××××××× ×××, ××××××××× ×××,
××××××××. P ××××××× ×××××××××× ×××××××××
××××××××××××; ××× ×××××××××××××× ××××××××××××
××× ×××××××××××××××× ××××××××××××× ××××××××××××,
××× ××××××××××× ×××× ××× ×××××××××
×××××××××××××××××××××××××××.

×××× ××××××××× ×××××××××××××××××××, ×××××××
×××× ×××× ×××××××××× ×××××××××
×××××××××××××××××××, ××××××× ×××××××× ×× ××××
××××××××××××× ××××××××××××××××××××××
×××××××××××××××××××; ××× ×××××××××××
××××××××××××× ××××××××××××××××××××. ××××,
××××××××××××× ×××××××, ×××××××××××××× ×××××××××
××××××××× ×××××××××. ××××× ××××××× ××××× ×××××

XXXXXXXXXXXXXXXX — XXXX “XXXXXX” XXXX XXXXXXXX
XXXXXXXXXXXXXXXX XXXXX XXXXXXX XXXXXXXXX
XXXXXXXXXXXXX.

XXXXXXXXXX LHCb XXXXXXXX XXXXXXXX XXXXXXXX
XX
XXXXXXXXXXXXX; XXXXXXXX XXXXXXXX
XX
XXXXXXXXXXXXX XXXXXXXX XXXX XXXXXXXX.

XXXX XX XX XX XX 1.2.

XX XX XX XX XX XX XX XX XX XX XX XX XX

XXX XXXXXXXX XXXXXXXX XXXXXXXX

XXXX XXXXXXXX XXXXXXXX XXXXXXX XXXXXXX XXXXX

XXXX XXXXXXXX XXXXXXX XXXXXXX XXXXX

LHCb XXXXXXXX Λ_b^0 XXXXXXXX (XXXX XXXXX
XXXXXXXXXXXX) XXXXXXXX XXXXXXXX
XXXXXXXXXXXXXXXX XXXXX XXXXXXX XXXXXXXX
XXXXX XXXXXXXX XXXXXXXX XXXXXXXX XXXXXXXX
XXXX XXXXXXXX XXXXXXXX XXXXXXXX.
XXXXXXXXXXXXXXXX, XXXXXXXX XXXXXXXX XXXX
XXXXXXXXXXXX XXXXXXXX XXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX.

XXX XXXXXXXX XXXXXXXX XXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXX:



XXXXXXXXXX XXXXXXXXXXX XXXXXXXXXXXXX

(XXXXXXXXXXXXXXXXXXXX LHCb

XXXXXXXXXX): “XXXXXXXXXXXX XXXXX

LHCb XXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXX XXXX

XXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX” XXXXXXXXX,

XXXXXXXXXXXXXXXXXX XXXX XXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXX XXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXX XXXXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXX “XXXXXXXXXXXX

XXXXXXXXXXXX.”

XX,

XXXXXXXXXXXXXXXXXX XXXX XXXXXXXXXXXXXXX XXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXX “XXXXXXXXXXXX” XXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX. XXXXX XXXXXXX

XXXXXXXXXXXXXXXX XXXXX XXXXXXXXXXXXXXX XXXX XXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXXX.

Physics World (IOP): “XXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXX–XXXXXXXXXXXX (XXXXXX)

XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXX XXXXXXXXXXXXXXX

XXXXXXXXXX XXXXXXXXXXXXXXX *LHCb* XXXXXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXXX.”

XXXXX XXXXXXX XXXX XXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXXX, XXXX XXXXXXXXXXX “XXXXXXXXXXXXXXXXXXXX”

XXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXX.

Science News (XXXXXXXXXXXXXXXXXXXXXXXXXXXX): “XXXXXXXXXX,
XX
XX
XX
XX
XX
XX
XX
XX.”

XX “XXXXXXX” XXXXXXXXXXXXXXXXXXXXXXX
XXXXX XXX: XXXXXX XXXXXXXXXXXXXXXXXXXXXXX
XXXXX XXXXXXXXXXXXXXXXXXXXXXX “XXXXXXXXXXXXXXXXXXXXXXX”.

XXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX, XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXX
XXXXXXXXXXXXXXXXXXXX XXXX XXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX.
XXXXXXX, XXXXXX XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX XXXX XXXXXXX, XXXXXXXXXXXXXXX,
XX XXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXX (XXXXXXXXXXXX XXXXXXXXXXXXXXX)
XXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXX; XXXX XXXXXXX XXXXXXXXXXXXXXXXXXXXXXX
XX XXXXXXXXXXXXXXXXXXXXXXX XXXX
XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXX.

XX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX (XXXXXXXXXXXXXXXXXXXXXXXXXXXX) XXXXXXXXXXXXXXXXXXXXXXX
XXXXXX XXXXXXXXXXXXXXXXXXXXXXX XXXXXX LHCb XXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XX XXXXXXXXXXXXXXXXXXXXXXX. XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXX XXXX XXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXX

XXXXXXXX, XXXXXXXXXXXXXXX XXXX XXXXXXXX XXXXXXXXXXXXXXX
XXXXXXXXXXXXX.

XXXX “XXXXXXX” XXXX XXXX XXXXXXXXXXX XXXXXXXXXXXXXXX
XXXXXXXXXXXXX XXXXXXXXXXXXXXX XXXXXXXXXXX XXXXXXXXXXXXXXXX
XXXXX, XXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXX
XXXXXXXXXXXX XXXXXXXXXXXXXXX.

X XXX XXX XXX X XX 1.3.

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”

XXXXXX XX XX XX XXXXXXXX
XXXXXX XX XX XX XXXXXXXX

XXXXX XXXXXXX XXXX XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXX,
“XXXXXXX” XXXXXXXXXXXXXXX XXXXXXXXXXXXXXX
XXXXXXXXXXXXX XXXXXXXXXXXXXXX XXXX XXXXXXXXXXXXXXX
XXXXXXXXXXXXX XXXXXXXXXXXXXXX XXXXXXXXXXXXXXX. XXXXXXX,
XXXXXXXXXXXXX XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXX
XXXXXXXXXXXXX XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXX
XXXXXXXXXXXXX, XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXX
XXXXXXXXXXXXX XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXX
XXXXXXXXXXXXX XXXXXXXXXXXXXXX XXXXXXXXXXXXXXX
XXXXXXXXXXXXX XXXXXXXXXXXXXXX XXXXXXXXXXXXXXX
XXXXXXXXXXXXX XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXX
XXXXXXXXXXXXX XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXX
XXXXXXXXXXXXX XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXX
XXXXXXXXXXXXX XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXX.

XXXXXXXXXX XXXXXXXXXX “XXXXXXXXXXXXXXXXXXXX
XXXXXX” XXXXXXXXXXXXXXXXXXXX XXXXXXXX (XXXXXX
XXXXXX) XXXXXXXXXXXX XXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXX XXXXXXXXXXXXXXX XXXX XXXXXXXX
XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXX XXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXX. XXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXX —
XXX XXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX ‘XXXXXXXXXXXX
XXXX’ XX XXXXXXXXXXXXXXX XXXXXXXXXXXXXXX.

XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXX, XXXXXXXXXXXXXXXXXXX XXXXXXX 1930-XX XXX
“XXXXXXXXXXXXXXXX XXXXXXX” XX XXXXXXXXXXXXXXXXXXXX:
XXXXXXXXXX XXX XXXXXXXXXXXXXXX XXXXXXXXXXXXXXX XXXXXXXXXXXXXXX
XXXXXXXX XXXX XXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXX XXXXXXX —
XXXXXXXXXXXXXXXX — XXXXXXXXXXXXXXX. XXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXX XXXXXXX XXXXXXX
XXXXX XXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXX:

“XXXX XXXX XXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX, XXXXXXXXXXX XXXXXXXXXXXXXXX
XXXXXXXX XXXXXXX XXXXXXXXXXXXXXXXXXX.”

“XXXXXXXX XXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXX XXXXXXX XXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXX.”

xxx xxxxxxxxxxxxxxxxxx xxx “xxxxxxxxxxxx
xxxxxxxx” xx xxxxxxxxxxxxxxxxxxxxxxxxxxxx —
xxxxxxxx xxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxxx
xxxxxxxxxx xxxxxxx xxxxxxxxxxxxxxxxxxxxxxx
xxxxxxxxxxxxxxxxxxxxxxxx “xxxxxxxxxxxx
xxxxxxxx” xxxxxxx xxxxxx — xxxxxxxxxxxxxxx
xxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxx.

xxx xxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxx
xxxxxxxxxxxxxxxxxxxxxxxx, xxx xxxxxxxxxxxxxxxxxx
xxxxxxxxxxxx xxxxxxx: xxxxxxxxxxx xxxxxxxxxxx
xxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxx
xxxxxxxxxxxxxxxxxxxxxxxx. “xxxxxxxxxxxx” xxxxxxx
xxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxx
xxxxxxxxxxxxxxxx xxxxxxxxxxxxxxx
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxx
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx; xxx xxxxxxxxxxx xxxxxxxxxxxxxxx
xxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxx, xxxxxx
xxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxx
xxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

xxxxxxxx xxxxxxxxxxx xxxxxxxxxxxxxxx
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx, xxxxxxx
xxxxxxxxxxxxxxxxxxxxxxxx xxxxxxx xxxxxxxxxxx
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxx
xxxxxxxx, xxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxx xxx
xxxxxxxx xxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxx
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxx
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

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 X X X X X X :

[illegible]

$$\begin{array}{|c|c|c|c|c|c|c|c|c|} \hline & & & & & & & & \\ \hline \end{array} \rightarrow \begin{array}{|c|c|c|c|c|c|c|c|c|} \hline & & & & & & & & +1 \\ \hline \end{array} + \begin{array}{|c|c|c|c|c|c|c|c|c|} \hline & & & & & & & & -1 \\ \hline \end{array}$$

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 X X X X X X X X**

XXXXXXXXXXXXXXXXXXXX”, XXXXX-XXXXXXX

X ,

X X X X X X X X X X X X X X X X

X X.

[illegible]

X X

XXXXXXXXXX. XXXXXXXXXXXXXXXXXXXXXXXXXXXX

"XXXXXXXXXXXXXXXXXXXXX" XXXXX

XXXXXXXXXXXXXXXXXXXX, XXXXX XXXXX-XXXXXX

"XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX"

XXXXXXXXXXXXXXX" XXXXXXXX XXXXXXXX, XXXXX

X X

XXXXXXXXXX.

X X

XXXXXXXXXXXX ('XXXXXXXXXX', 'XXXXXX')

X X X X X X X X X X X X X X X X X X X X X X X

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX.

XXX XXXXXXXXXXXX XXXXXXXXXXXX "XXXXX XXXXXXXX"
 XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXX - XXXXXXXX
 XXXXXXXXXXXX "XXXXXXXXXXXXXXXXXX XXXX
 XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX"
 XXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX. XXX
 XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXX XXXXXXXXXXXX XXXX
 XXXXXXXXXXXX XXXXXXXXXXXX XXXXXXXXXXXX XXXXXXXXXXXXXXXX,
 XXXXXXXX XXXXXXXXXXXX XXXXXXXX
 XXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXX
 XXXX XXXX XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXX
 XXXXXXXXXXXXXXXXXXXXXXXXXXXX.

 XXXXXXXX XXXXXXXXXXXX XXXXXXXXXXXX XXXXXXXXXXXX
 XXXXXXXXXXXXXXXX: XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXX
 XXXX XXXXXXXXXXXX XXXXXXXXXXXX XXXXXXXXXXXX XXXXXXXXXXXXXXXX
 XXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXX:
 XXXXXXXXXXXXXXXXXXXX XXXXX XXXXXXXXXXX XXXXXXXXXXXXXXXX
 XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXX XXXXXXXXXXXXXXXX XXXXXXXX
 XXXXXXXXXXXXXXXXXXXX XXXX XXXXXXXXXXXXXXXX.

 "XXXXX" (XXXXXXXXXXXXXXXX XXXXXXXXXXXX) XXXX
 XXXXXXXXXXXXXXXX, XXXXXXXXXXXXXXXX + XXXXXXXXXXXXXXXX
 XXXX XXXXX XXXXX XXXXX-XXXXXXXXXXXXXXXXXXXXX
 XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX.
 XXXXXXXXXXXXXXXXXXXX XXXX XXXXXXXXXXXXXXXXXXXX XXXXXXXX XXXXXXXX-
 XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX (XXXXXXXXXXXXXXXXXXXXX ~15
 XXXXXXXXXXXXXXXX, XXXXXXXXXXXXXXXX XXXXXXXX 30
 XXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXX XXXXXXXXXXXXXXXX)
 XXXXXXXXXXXX XXXXXXXXXXXXXXXX
 XXXXXXXXXXXXXXXXXXXXXXXXXXXX "XXXXX XXXXXXXX

XXXXXXXXXXXXXXXXX – XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

XXXXXXXXXX XXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXX.

XXXXXXXXXXXX XXXXXXX XXXXXXXXXXXXXXXXXXXXXXXX "XXXXX"

XXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXX

XXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXX 'XXXXXXXXXXXXX'

XXXXXXXXXXXXXXXXXX. XXXXXXXXXXX XXXXX XXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXX, XXXXXXXXXXXXXXXXXXXXXXXX XXXXX –

XXXXXXXXXX XXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX, XXXXXXX XXXX XXXX

XXXXXXXXXX XXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXX. XXXXX

"XXXXXXXXXX XXXXXXXX" XXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXXXX, XXXXXXX XXXXXXXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXX XXXXXXX: XXXXX XXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXX XXXX

XXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXX.

XXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXX

XXXXXXXXXXXX.

(2025) XXXXXXX XXXXXXXXXXXXXXXXXXXXXXXX XXXXXXX
XXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXX (LHC) 'XXXXXXXXXXXXX'
XXXXXXXXXXXXXXXXXXXXXXXXXXXXX

XXXXX: XXXXXXXX XXXXXXXX

XXXXX XXXXXXX XXXXXXXXXXXXXXXX XXXXXXX XXXXXXXXXXXXXXXX

XXXXXXXXXXXX XXXXXXX XXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXX (CMS

XXXXXXXXXXXX ATLAS, XXXXXXXXXXXXXXX 2025) XXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXX XXXXX
XXXXXXXXXX XXXXXXXXXXXXX
XX.

“XXXXXXXXXXXXXXXX” XXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXX-
XXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXX
XX.

XXXXXX XXX XX 2.

XXXXXX

“XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX” XXXXX
XX
XX
XXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXX. XXXX XXXX XXXXXXXXXXXXXXXXXXXXXXX,
XX
XX
XX, XXXXXXXXX
XX
XXXXXXXXXX XXXX XXXXXXXXXXXXXXX “XXXXXXXX XXXXXXX” XXXXX
XXXXXXXXXXXXXXXXXXXX.

XXXXXXXX XXXXXXXXXXXXXXX XXXX XXXXXXXXXXX XXXXXXX,
XXXXXXXX XXX
XX
XX.
XXXXX XXX

X X

XXXXXXXXXX.

XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX, LHCb

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 X X X X , X X X X X X X X X

XXXXXXXXXXXX XXXXXX.XXXXXXXXXX

X X

XXXXXXXXXX, XXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXX

X X

XXXXXXXXXX XXXXXXXXXX 'XXXXXXXX-XXXXXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX,

X X.

XXXXXXXXXXXX XXXXXX XXXXXXXXXXXXXXXXXXXX XXXXXXX,

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 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

XXXXXXXXXXXXXXXXXXXX XXXX XXXXXXXXXXXXXXXXXXXXXXX, XXXXX

XXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX (XXXXXXXX)

X X

XXXXXXXXXX XX XXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX.

X X

xxxx xxxxxxxxx  CosmicPhilosophy.org xxx 42
 xxxxxxxxxx xxxxxxxxxx.



ⓧⓧⓧⓧⓧ: ta.cosmicphilosophy.org/cp-violation/

X X X X X X X X X X X X X X X X X X X X X X X X

[illegible]







