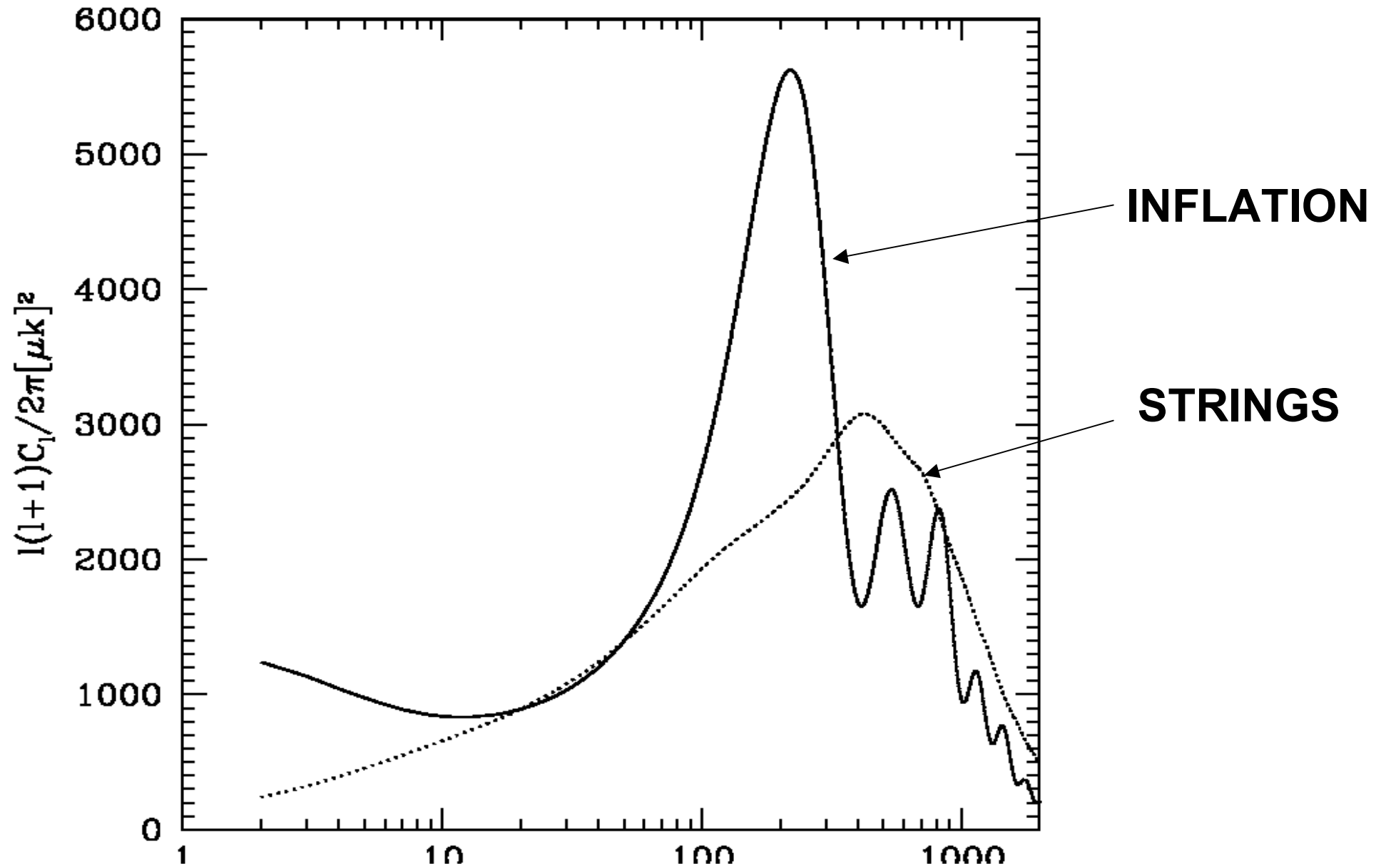


# TOPOLOGICAL DEFECTS

- AN ADDITIONAL SOURCE OF  
B-MODE FLUCTUATIONS ?

**RICHARD BATTYE  
JODRELL BANK OBSERVATORY  
UNIVERSITY OF MANCHESTER**

# NOT THE PRIMARY SOURCE



# WELL MOTIVATED MODELS OF INFLATION PREDICT STRINGS

- **(SUSY) HYBRID INFLATION**

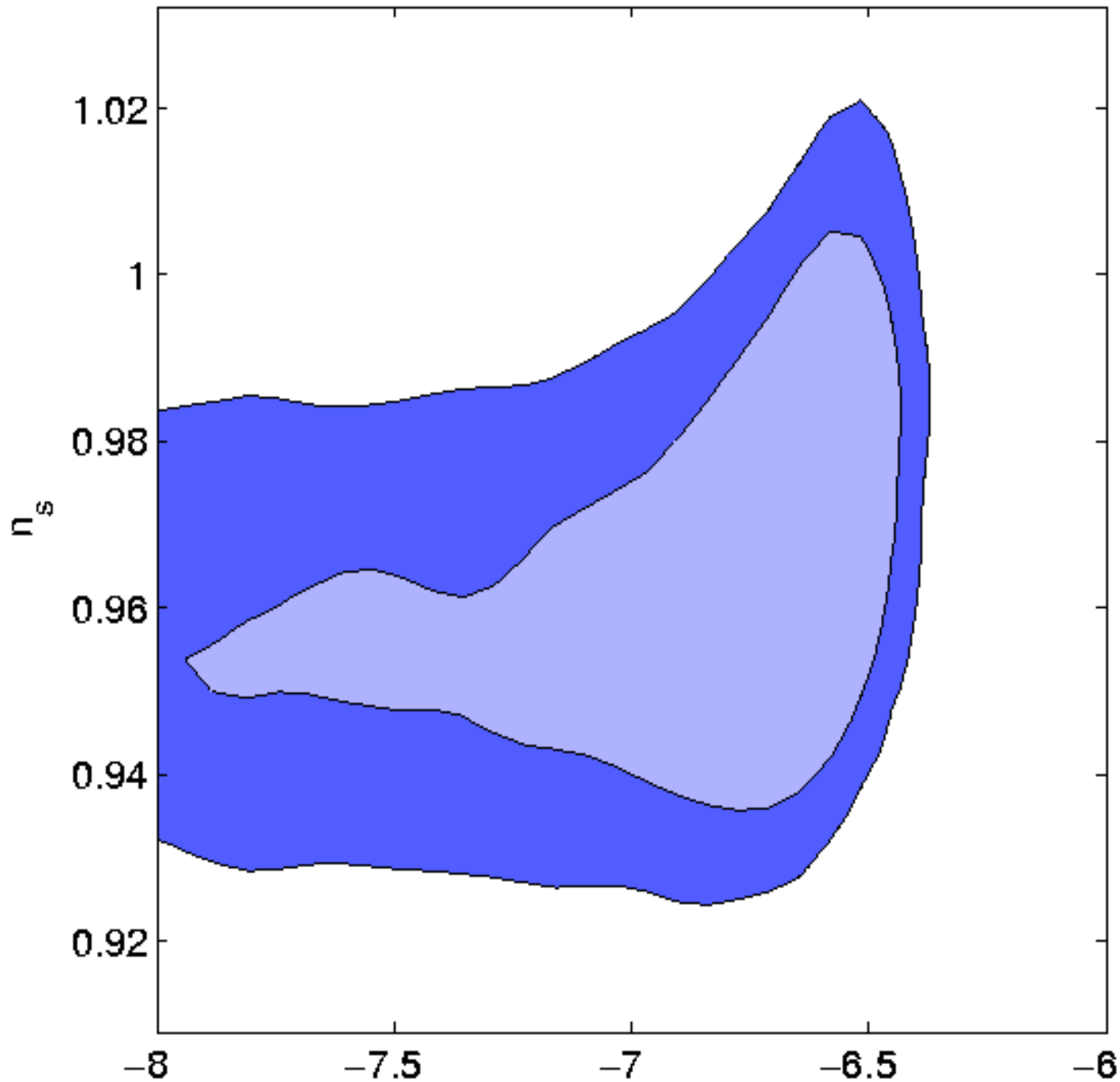
**F-TERM INFLATION**  
**D-TERM INFLATION**

**→ STRINGS FORM DURING WATERFALL TRANSITION**

- **BRANE INFLATION**

**MOTIVATED BY STRING THEORY**

**BOTH NATURALLY PREDICT  $G_\mu \sim 10^{-(6-7)}$**

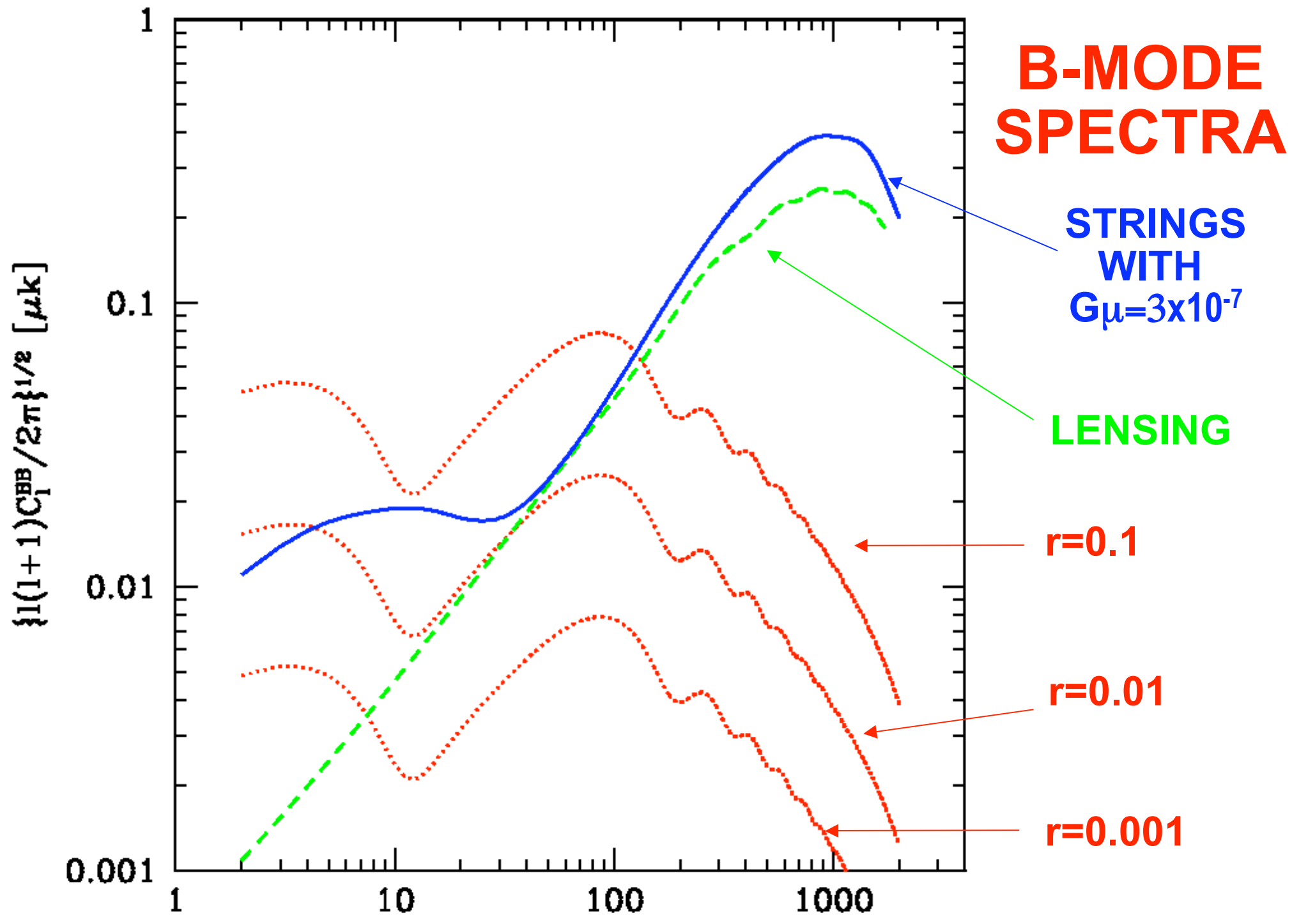


## CURRENT STATUS

$$G\mu < 3 \times 10^{-7}$$

DEGENERACY  
BETWEEN  
 $n_s - G\mu$

(Battye,  
Garbrecht &  
Moss 2006)



# ALTERNATIVE WINDOW ON GUT SCALE

Eg. SUSY F-TERM INFLATION  $W = \kappa \hat{S}(\hat{G}\bar{\hat{G}} - M^2) \rightarrow G\mu \propto \left(\frac{M}{M_{\text{pl}}}\right)^2$

