

Niobé

$T_N \sim 1.5 - 3$ mk.

Funded for 3 year improvement
program 1998-2001.

Activities

Data analysis: filters

Improved filters for better
discrimination of accidentals.

Data analysis: coincidence analysis

Rome - UWA bursts

UWA - IUCAA pulsars

Collaboration with GRAIL

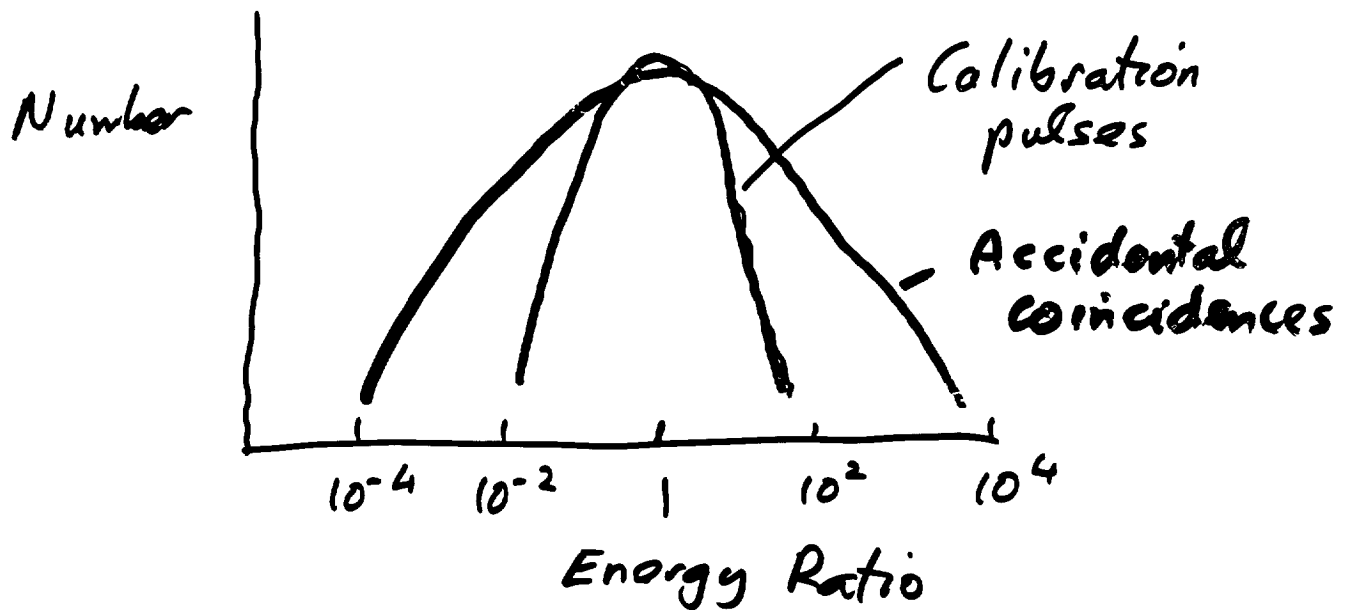
Improved microwave transducers

Filtering Issues.

Noise introduces burst energy-time uncertainty

Different filters introduce different event lists.

Noise is non-stationary



Upgrade Program.

1. Improved microwave amplifier + improved 300K isolation
completion: mid 1998 $T_N \sim 300 \mu\text{K}$
 $\Delta f \sim 10 \text{ Hz}$
2. Improved dark fringe locking —
completion: late 1998 $T_N \lesssim 100 \mu\text{K}$.
3. Improved transducer
collab with GRAIL
high Q resonator, 3 mode. $\Delta f \sim 90$
4. He^3 cooling to 300mK
completion: 2002. $T_N \lesssim 1 \mu\text{K}$.
[approach to QL]. $\Delta f \sim 90 \text{ Hz}$.
Collab. with GRAIL. $\tilde{h} \sim 10^{-22} / \sqrt{\text{Hz}}$

Niobē - AlG-O.

Cross correlation

Vibration isolation

Data analysis

Thermal noise

Note 1, Linda Turner, 04/30/98 10:54:59 AM
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