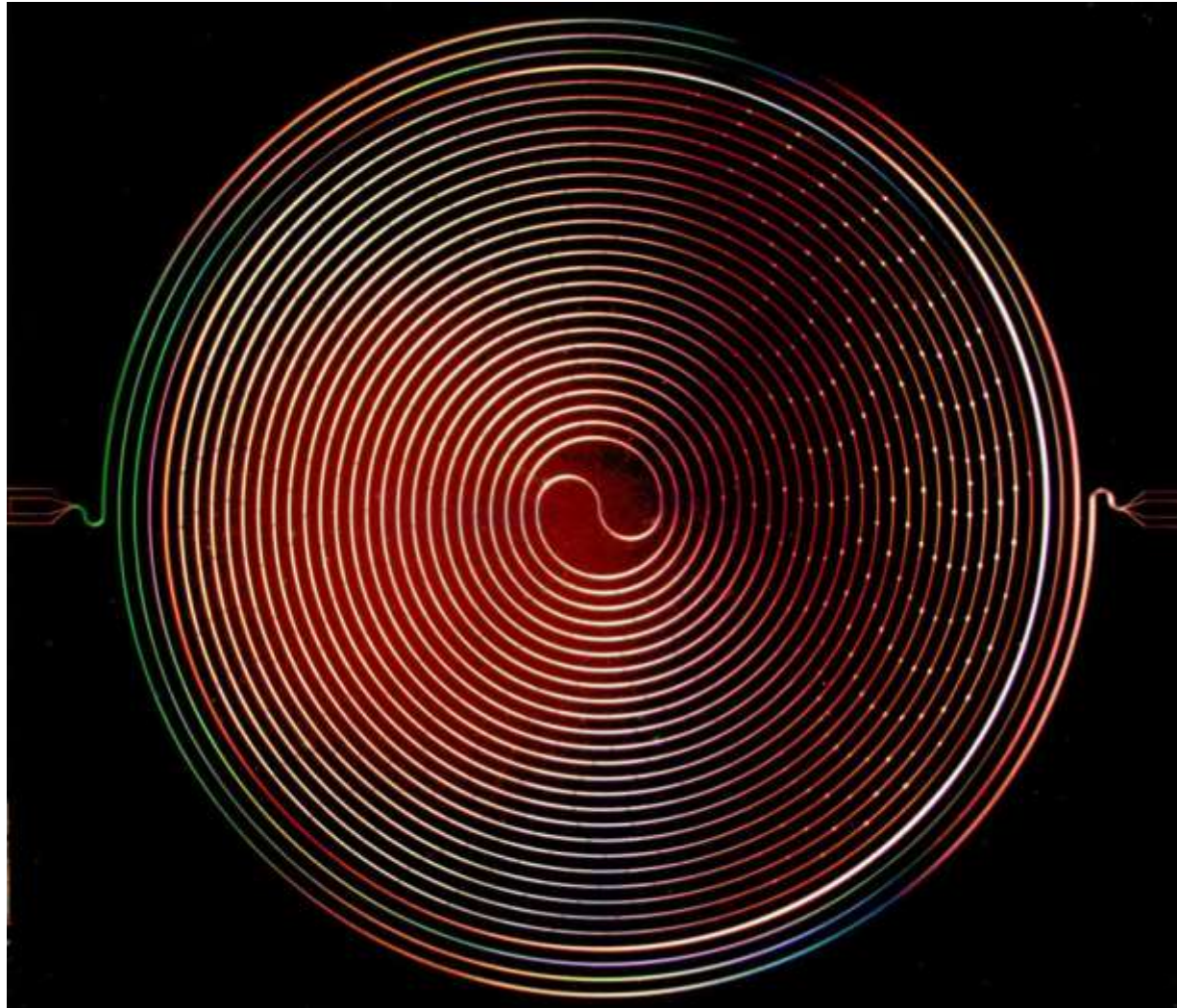


# Quantum Amplifier

*photo: NASA*

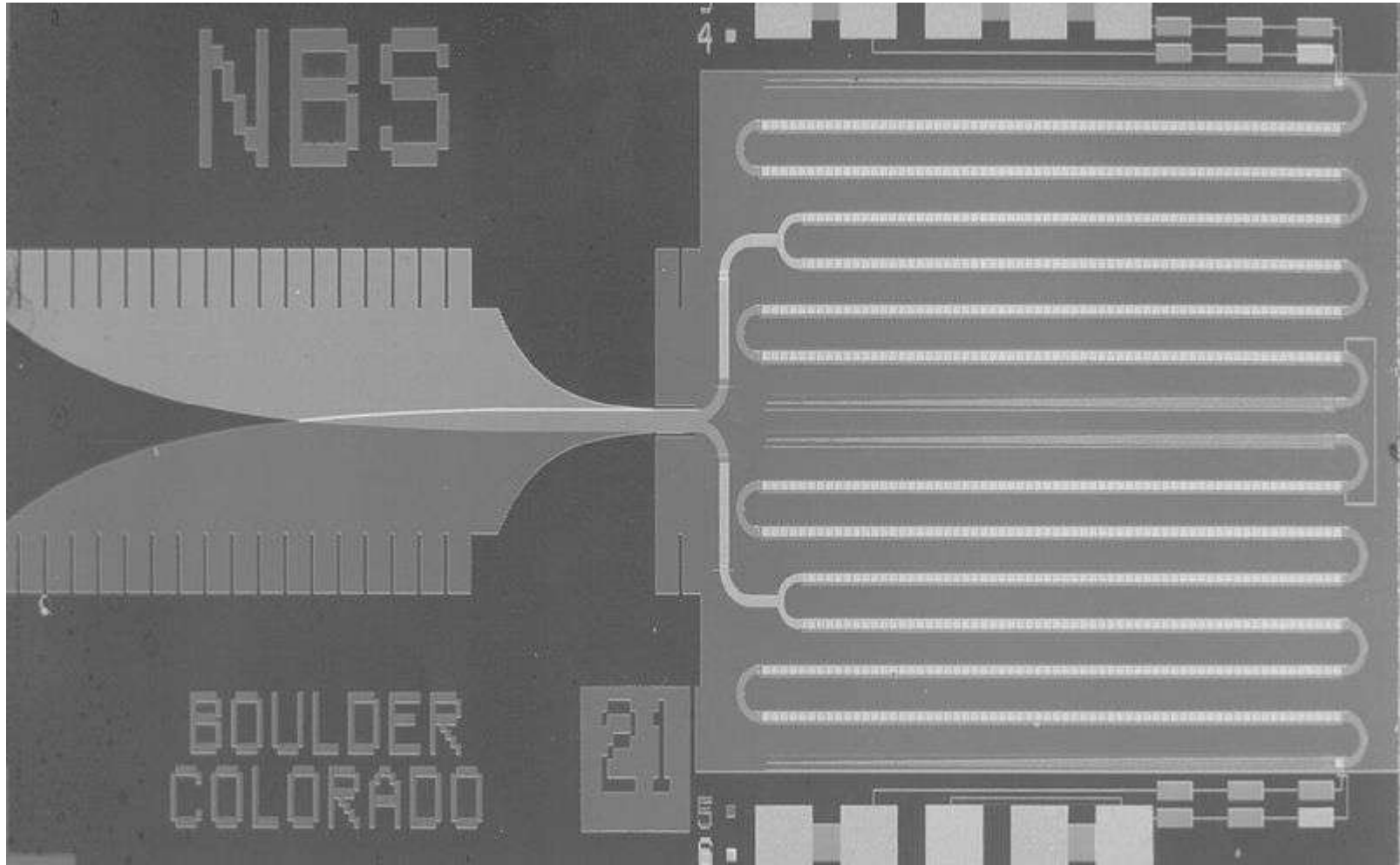


Information comes from :

“A Wideband, Low-Noise Superconducting Amplifier with  
High Dynamic Range”

Byeong Ho Eom, Peter K. Day,  
Henry G. LeDuc, Jonas Zmuidzinas  
January 12, 2012

<http://arxiv.org/pdf/1201.2392v1.pdf>



Chip-sized one-volt voltage standard device used for standards measurement. It was developed by NIST based on an array of 3020 superconducting Josephson junctions.

*photo: NIST*

**“Like a Josephson junction, a thin superconducting wire behaves as a nondissipative inductor for currents below a critical current  $I_c$ .”**

**- *op. cit.***