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The Woodstock of Physics: The Hyped Future Then (1987)... The Actual Situation Now (2017).

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In late January, 1986, Georg Bednorz stayed after work at the IBM Zurich Research Laboratory to measure the temperature dependence of the conductivity of a copper oxide perovskite whose preparation had recently been published by the CNRS group at the University of Caen. He had recognized that the Caen material composition matched that of the “Jahn-Teller-Bipolaron” high-temperature superconductivity pairing model speculated previously by his IBM mentor, Alex Mueller. One of his samples revealed trace superconductivity near 20-25 K, a stupendous result at the time¹. In the late fall of 1986, Paul Chu and his collaborators at U. Huston and Alabama detected a sharp transition at 91 K in the same perovskite family. Subsequently, confirmation pandemonium ensued throughout the planet, resulting in the gathering termed “The Woodstock of Physics” convened at the New York Hilton the second week of March, 1987. Would HTSC thus embody the long sought “energy deliverance of mankind?” Not yet, despite obtaining materials reaching ambient pressure Tc’s of 135 K, and after many successful demonstrations of power applications² of these discoveries worldwide over the last three decades. Why not³ and when will its promise be fulfilled? That’s the subject of this presentation.

[1]http://w2agz.com/Publications/Opinion%20&%20Commentary/W2AGZ/Cold%20Facts/2016/PMG%20article%20from%20cold_facts_vol32_no1_2016.pdf

[2][http://w2agz.com/Publications/Science%20&%20Technology/W2AGZ/09b%20\(2010\)%20Superconductivity%20in%20Power%20Applications,%20Wroclaw%20ICEC-ICMC.pdf](http://w2agz.com/Publications/Science%20&%20Technology/W2AGZ/09b%20(2010)%20Superconductivity%20in%20Power%20Applications,%20Wroclaw%20ICEC-ICMC.pdf)

[3] http://w2agz.com/Publications/Opinion%20%20Commentary/W2AGZ/PowerMag/Upbraiding-the-Utilities_4242.pdf