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**固有ジョセフソン接合からの狭線幅・高強度テラヘルツ放射****Powerful THz emission with narrow linewidth from intrinsic Josephson junctions**

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In recent years the investigation of coherent terahertz (THz) emission from stacks of intrinsic Josephson junctions (IJJs) made of the high temperature superconductor  $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8$  (BSCCO) has become a major field of research, both in terms of experiment and theory. Although the detected emission power was only in the range of some 10 nW, an extrapolation to  $4\pi$  yielded an estimated total power around 0.5  $\mu\text{W}$ . In subsequent years the (estimated) total emission power improved to values  $>30 \mu\text{W}$ . On the other hand, at low bias the linewidth of radiation is on the order of 0.5 GHz or higher.

In this talk, we will report experimental results including, 1) at high bias the linewidth of radiation has turned out to be very small, reaching values well below 50 MHz; 2) the maximum detected power is 25  $\mu\text{W}$ , where the number refers to the detected power, i. e. it is not extrapolated to  $4\pi$ .