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## **Latest lattice design and optimization for Southern Advanced Photon Source storage ring**

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The Southern Advanced Photon Source (SAPS) is a 3.5 GeV, kilometer-scale, ultra-low emittance storage ring to be built next to the CSNS (China Spallation Neutron Source) in Guangdong Dongguan, China. A preliminary lattice design for SAPS storage ring with an emittance of 32 pm.rad has been proposed before. Now, the SAPS lattice is continuously under extensive design and optimization. In this paper, the latest design of lattice is introduced, and the linear and nonlinear optimization is presented.

### **Funding Agency**

### **Footnotes**

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Yes

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