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**Acceleration of polarized proton in the AGS with multiple partial Siberian snakes** JUNPEI TAKANO, RIKEN / BNL / TITech, LEIF AHRENS, MEI BAI, KEVIN BROWN, ERNEST COURANT, CHRISTOPHER GARDNER, JOSEPH GLENN, C-A Dept., BNL, TOSHIYUKI HATTORI, TITech, HAIXIN HUANG, FANGLEI LIN, ALFREDO LUCCIO, WILLIAM MACKAY, C-A Dept., BNL, MASAHIRO OKAMURA, RIKEN, VADIM PTITSYN, THOMAS ROSER, STEVEN TEPIKIAN, NICHOLAOS TSOUPAS, C-A Dept., BNL, RIKEN TEAM, C-A DEPT., BNL TEAM, TITECH TEAM — The polarized proton has been accelerated in Alternating Gradient Synchrotron (AGS) and Relative Heavy Ion Collider (RHIC) at Brookhaven National Laboratory (BNL) for studying the spin physics of proton. The normal conducting helical dipole partial Siberian snake (Warm Snake) and the super conducting helical dipole partial Siberian snake (Cold Snake) have been installed in the AGS for overcoming the imperfection and intrinsic depolarizing resonances. The cold snake had been under commissioning in RUN5, but the polarization of the polarized proton in the AGS was improved with the warm snake only. The AGS also has a previously used solenoid partial snake. We will show a new idea of using three snakes for perfectly canceling the spin mismatch and some calculated results of spin tune with these three snakes.

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