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The effect of spin oscillations in a ring with a quasi-frozen spin and its influence on the procedure for searching for the deuteron EDM

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The ultimate goal of studying spin-radial motion in a ring with "Quasi-Frozen Spin" is to develop a procedure for measuring the deuteron electric dipole moment. For a ring with a "Frozen Spin", the authors developed the Frequency Domain Method. A distinctive feature of a ring with a "Quasi-Frozen Spin" is spin oscillation with a small amplitude around the direction of motion. In this work, we study the influence of these oscillations on the final sensitivity of deuteron EDM search.

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Footnotes

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