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### PHYSICS PUBLICATIONS, REPORTS, E-PRINTS AND PROPOSALS

*Russian works that have not been translated into English are preceded by an asterisk; translations of the titles are in square brackets. Muon (g-2) Collaboration and EDM Collaboration publications are a selection.*

#### Publications

##### 2020

155. with O. Kim *et al.*, Reduction of coherent betatron oscillations in a muon g-2 storage ring experiment using RF fields. *New J. Phys.* **22**, 063002 (2020).

##### 2019

154. with S. Haciomeroglu and Y.K. Semertzidis, Magnetic field effects on the proton EDM in a continuous all-electric storage ring. *Nucl. Instr. Meth. A* **927**, 262-266 (2019).

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153. with G. Guidoboni *et al.* (JEDI Collaboration), Connection between zero chromaticity and long in-plane polarization lifetime in a magnetic storage ring. *Phys. Rev. Accel. Beams* **21**, 024201 (2018).

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152. Yu. F. Orlov, He seemed permanently inspired. [Reminiscence of V.N. Gribov.] In Yuri L. Dokshitzer, Peter Levai, Julia Nyiri, eds., *Gribov-85 Memorial Volume: Exploring Quantum Field Theory. Proceedings of the memorial workshop devoted to the 85th birthday of V.N. Gribov* (World Scientific, Singapore, 2017), p. 3.

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151. with V. Anastassopoulos *et al.* A storage ring experiment to detect a proton electric dipole moment. *Rev. Sci. Instrum.* **87**, 115116 (2016).

150. with G. Guidoboni *et al.* (JEDI Collaboration), How to reach a thousand-second in-plane polarization lifetime with 0.97-GeV/c deuterons in a storage ring. *Phys. Rev. Lett.* **117**, 054801 (2016).

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149. with E. M. Metodiev *et al.*, Analytical benchmarks for precision particle tracking in electric and magnetic rings. Nucl. Instr. Meth. **A797**, 311-318 (2015).

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147. Yuri Orlov, Eanna Flanagan and Yannis Semertzidis, Spin rotation by Earth's gravitational field in a "frozen-spin" ring. Phys. Lett. **A376**, No. 45, 2822-2829 (2012).

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146. Yuri F. Orlov, "Robinson's Sum Rule" Revisited. Phys. Rev. ST Accel. Beams **13**, 024901 (2010).

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144. with F. Lin *et al.*, Overview of (some) computational approaches in spin studies. *Proceedings of the 10th International Computational Accelerator Physics Conference (ICAP09), San Francisco, CA, 31 August-4 September, 2009*.  
<http://epaper.kek.jp/ICAP2009/papers/mo4iopk04.pdf>

143. with G.W. Bennett *et al.* (Muon g-2 Collaboration), An improved limit on the muon electric dipole moment. Phys. Rev. **D80**, 052008, 1-18 (2009).

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142. with G.W. Bennett *et al.* (Muon g-2 Collaboration), Search for Lorentz and CPT violation effects in muon spin precession. Phys. Rev. Lett. **100**, 091602 (2008).

141. Yuri F. Orlov, A method to remove synchrotron frequency from the spectrum of momentum-forced radial oscillations. Nucl. Instr. Meth. **A587**, 1-6 (2008).

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140. with G.W. Bennett *et al.* (Muon g-2 Collaboration), Statistical equations and methods

applied to the precision muon ( $g-2$ ) experiment at BNL. Nucl. Instr. Meth. **A579**, 1096-1116 (2007).

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139. Yuri F. Orlov, Spin resonance conditions for intrinsic and induced electric dipole moments of a spin-1 particle. Phys. Lett. **A357**, No. 2, 120-124 (2006).

138. Yuri F. Orlov, William M. Morse and Yannis K. Semertzidis, Resonance method of electric-dipole-moment measurements in storage rings. Phys. Rev. Lett. **96**, 214802 (2006).

137. with G.W. Bennett *et al.* (Muon  $g-2$  Collaboration), Final report of the muon E821 anomalous magnetic moment measurement at BNL. Phys. Rev. **D73**, 072003 (2006).

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136. Yuri F. Orlov (for the Storage Ring EDM Collaboration), Resonance method of EDM measurements in storage rings. In D. Chiladze, A. Kacharava, H. Stroehrer, eds., *Proceedings of STORI '05. 6th International Conference on Nuclear Physics at Storage Rings, Jülich-Bonn, Germany, 23-26 May 2005*. Schriften des Forschungszentrums Jülich: Materie und Material **30**, 223-226 (2005).

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135. with G.W. Bennett *et al.* (Muon  $g-2$  Collaboration), Measurement of the negative muon anomalous magnetic moment to 0.7 ppm. Phys. Rev. Lett. **92**, 161802 (2004).

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133. with P. Shagin *et al.* (E821 Collaboration), Recent results of muon  $g-2$  Collaboration. 32nd SLAC Summer Institute on Particle Physics (SSI 2004): Nature's Greatest Puzzles, Menlo Park, CA, 2-13 August 2004. eConfCO40802:TUT007 (2004).

132. with J.P. Miller *et al.* (EDM Collaboration), A new experiment to measure the muon electric dipole moment. In *Intersections of Particle and Nuclear Physics. Proceedings of the 8th Conference on the Intersections of Particle and Nuclear Physics (CIPANP 2003)*, New York, New York, 19-24 May 2003 (New York, 2003), pp. 196-199. AIP Conf. Proc. **698**, 196-199 (2004).

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119. with S. Redin *et al.* (Muon g-2 Collaboration). Recent results and current status of the muon g-2 experiment at BNL. *Can. J. Phys.* **80**, 1355-1364 (2002).

118. with C. S. Ozben *et al.* (Muon g-2 Collaboration), Precision measurement of the anomalous magnetic moment of the muon. In *Proceedings of the 30th SLAC Summer Institute on Particle Physics: Secrets of the B Meson (SSI 2002), SLAC, Menlo Park, CA, 5-16 August 2002*, pp. 464-479.

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114. with V.W. Hughes *et al.* (Muon g-2 Collaboration), Muon g-2 experiment at Brookhaven National Laboratory. *Nucl. Phys. B Proc. Suppl.* **105**, 156-159 (2002).

113. with E.P. Sichtermann *et al.* (Muon g-2 Collaboration), Precision measurement of the muon anomalous magnetic moment. In *Cosmology and Elementary Particle Physics* (Fort Lauderdale, 2001), pp. 210-219. *AIP Conf. Proc.* **624**, 210-219 (2002).

112. with I.B. Logashenko *et al.* (Muon g-2 Collaboration), Results from the muon g-2 experiment. In *Supersymmetry and Unification of Fundamental interactions. Proceedings of the 9th International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY01), Dubna, Russia, 11-17 June 2001* (World Scientific, 2002), pp. 3-11.

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muon anomalous magnetic moment, *Phys. Rev. Lett.* **86**, 2227-2231 (12 March 2001).

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102. with H.N. Brown *et al.* (Muon g-2 Collaboration), Precision measurement of muon g-2 and accelerator related issues. In *2nd Asian Particle Accelerator Conference. Proceedings of the 2nd Asian Particle Accelerator Conference, Beijing, China, 17-21 September 2001* (Institute of High Energy Physics, Beijing, 2001), pp. 862-866.

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#### 1981-82

*The following two articles were smuggled out of Prison Camp 37-2, the Urals, USSR, and not reviewed by the author:*

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