

**FLAP COLLABORATION:
TASKS AND PERSPECTIVES.
STUDY OF FUNDAMENTALS AND NEW
APPLICATIONS OF CONTROLLABLE
GENERATION OF ELECTROMAGNETIC
RADIATION BY RELATIVISTIC ELECTRONS
USING FUNCTIONAL MATERIALS**

*A. Baldin, E. Baldina¹, D. Bogoslovsky, V. Bleko, A. Beloborodov,
A. Dorokhov, A. Fedorov, P. Kharyuzov, D. Korovkin, A. Safonov,
V. Kobets, A. Zhemchugov, M. Gostkin, I. Samojalova, A. Trifonov,
S. Tyutyunnikov, K. Yunenko*

Joint Institute for Nuclear Research, Dubna

*A. Kubankin, R. Nazhmudinov, I. Kishchin, V. Zakhvalinskii,
L. Myshelovka, K. Vokhmyanina*

Belgorod National Research University, Belgorod, Russia

S. Stuchebrov, A. Potylitsyn, A. Bulaovskaya, Yu. Cherepennikov

National Research Tomsk Polytechnic University, Tomsk, Russia

V. Kim, E. Kuznetsova, A. Zelenov

Petersburg Nuclear Physics Institute, National Research Center “Kurchatov Institute”,
Gatchina, Russia

St. Petersburg Polytechnic University, St. Petersburg, Russia

P. Karataev, K. Fedorov

John Adams Institute at Royal Holloway, University of London, UK

Yu. Bazarov, M. Karpov

Federal State Unitary Enterprise “Russian Federal Nuclear Center — All-Russian
Research Institute of Experimental Physics”, Sarov, Russia

¹E-mail: e.baldina@mail.ru

S. Kuleshov, J. Zamora Saa

Center for Theoretical and Experimental Particle Physics (CTEPP)
of UNAB (Universidad Andres Bello), Santiago, Chile

A. Aryshev^{a,b}, K. Popov^b

^a KEK: High Energy Accelerator Research Organization, Tsukuba, Japan

^b SOKENDAI: The Graduate University for Advanced Studies, Tsukuba, Japan

*V. Kocharyan^a, A. Mkrtchyan^a, A. Mousisyan^a, L. Grigoryan^a,
A. Saharian^a, L. Aloyan^b, Y. Dalyan^b, N. Karapetyan^b,
A. Avetisyan^b, A. Shahbazyan^b*

^a Institute of Applied Problems of Physics, National Academy of Sciences of Armenia, Yerevan

^b Yerevan State University, Yerevan

We present the scope of research of a new collaboration FLAP (Fundamental & applied Linear Accelerator Physics collaboration) devoted to the study of the basics of electromagnetic interactions and new applications of controllable generation of electromagnetic radiation by relativistic electrons using functional materials.

Представлены направления исследований новой коллаборации FLAP (Fundamental & applied Linear Accelerator Physics collaboration): описано изучение основ электромагнитных взаимодействий и новые приложения управляемой генерации электромагнитного излучения релятивистскими электронами с использованием функциональных материалов.

PACS: 07.57.Kp; 29.40.-n; 85.25.Pb; 41.75.Ht

Received on December 7, 2020.