Method of assessment of textual emotiveness with use of psycholinguistic markers on base of morphological features for analysis of social processes in networks and blogs

<sup>1</sup>Gudovskikh D.V., <sup>1,2</sup>Sboev A.G., <sup>1</sup>Rybka R.B. and <sup>1</sup>Moloshnikov I.A. <sup>1</sup>NRC "Kurchatov Institute", <sup>2</sup>National Research Nuclear University MEPhI <u>dvgudovskikh@gmail.com</u>, <u>sag111@mail.ru</u>, <u>rybkarb@gmail.com</u>, <u>ivan-rus@yandex.ru</u>

Abstract: A new quantitative approach in identifying the emotionally colored texts that reflect the excited state of its authors is proposed. This approach uses special psycholinguistic markers of text based on morphological characters ratios of russian language. To apply such markers the morphological parser in combination with ensemble of SVM classifiers is developed. Each SVM classifier corresponds to certain morphological feature. The results are later aggregated to determine correct form of each word. Testing results of selected topics texts are presented. The study was conducted using texts from different sources such as news, regular blogs, microblogs, social network posts. It showed that results of developed approach can be a useful extension of Big Data methods of traditional sentiment analysis and it can be applicable in developing methods of personality computing.