Anotation:
In order for the speech communication of artificial intelligence systems (robots, avatars, personal assistants) to act naturally and effectively, it is necessary to know how the characteristics of interpersonal conversation, when implemented in artificial intelligence systems, affect the nature and effectiveness of human-machine communication. One of these characteristics, with which this basic research is primarily concerned, is the entrainment of acoustic-prosodic characteristics of speech between speakers, and the question how such entrainment affects the perceived trust of users towards the capabilities of the automated system. Our research leads to two basic insights: 1) speech enrainment has the potential to significantly affect the perception of the capabilities of artificial intelligence systems, but 2) the relationship between entrainment at multiple acoustic-prosodic properties, such as volume or pitch, and the perception of system capabilities is immensely complex. Comprehensive guidance on the effective implementation of speech entrainment into artificial intelligence systems requires a better understanding of this complexity.

[1] Ramiro H. Gálvez, Agustín Gravano, **Štefan Beňuš**, Rivka Levitan, **Marian Trnka**, Julia Hirschberg, An empirical study of the effect of acoustic-prosodic entrainment on the perceived trustworthiness of conversational avatars, Speech Communication, Volume 124, 2020, Pages 46-67, ISSN 0167-6393, https://doi.org/10.1016/j.specom.2020.07.007