

# **On the Utilization of Residual Source Redundancy for Iterative Joint Source-Channel Decoding of Variable-Length Codes**

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## **ABSTRACT**

We present a novel symbol-based a posteriori probability (APP) decoder for packetized variable-length encoded source indices transmitted over wireless channels, which exploits residual index correlations after source encoding for error correction. By additionally protecting the variable-length encoded bitstream with channel codes, an iterative decoding scheme can be obtained where the proposed APP source decoder serves as constituent decoder.