Coding for Aeronautical Telemetry

Guest Editor:

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Message from the Guest Editor

Aeronautical telemetry is a one-way air-to-ground radio link that transmits measurements made on an airborne test article to flight test engineers on the ground. The radio link is characterized by a long distance—in the order of 100 miles (161 km)—as being highly dynamic and hence having a high Doppler, and, when the elevation angle from the ground station is low, severe frequency selective multipath propagation. Error control coding has been used to improve data integrity in this non-ideal propagation environment as well as to extend the usable range between the test article and the ground station. The goals of this Special Issue are to assess the impact of the error control codes currently used in aeronautical mobile telemetry, examine potential improvements in error control coding, and to explore other forms of coding, such as physical layer security codes, space–time coding, coded modulation, etc., for potential applications in aeronautical telemetry.

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Special Issue

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Message from the Editor-in-Chief

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