Figure 3 Beampatterns of different beamformers from one trial, where SNR = 10dB, INR = 10dB, UR = −10dB and the results are obtained after 100 STI frames.

Figure 4 The performance of the proposed beamformer with the estimated signal power by using (26), where SNR = 0dB, UR = 20dB and the interference-plus-noise covariance matrix is known exactly. (a) The output SINR versus STI index for the Max-SINR beamformer, the proposed beamformers with the true and estimated signal power, (b) The vectorial angle error versus STI index for the proposed beamformers with the true and estimated signal power.

Figure legends

Figure 1 Output SINR versus STI index for different URs under different SNRs, where INR = 10dB and the STI length is 512. (a) SNR=10dB, (b) SNR=0dB, (c) SNR=-10dB, (d) SNR=-20dB, (e) SNR=-30dB. Figure 2 Output SINR versus SNR for different beamformers under different URs, where INR = 10dB and the results are obtained after 80000 STI frames. (a) UR=-20dB, (b) UR=-10dB, (c) UR=0dB, (d) UR=10dB, (e) UR=20dB. Figure 3 Beampatterns of different beamformers from one trial, where SNR = 10dB, INR = 10dB, UR = −10dB and the results are obtained after 100 STI frames. Figure 4 The performance of the proposed beamformer with the estimated signal power by using (26), where SNR = 0dB, UR = 20dB and the interference-plus-noise covariance matrix is known exactly. (a) The output SINR versus STI index for the Max-SINR beamformer, the proposed beamformers with the true and estimated signal power, (b) The vectorial angle error versus STI index for the proposed beamformers with the true and estimated signal power.