Errata on "Time-of-arrival estimation for blind beamforming"

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It has come to our attention, that the article [1] contains notational errors, which are corrected below.

1. Eq. (7) should read: \( a(\omega, t) = \exp(i\omega \tau) \)

2. The observation matrix \( H \) for the Kalman filter eq. (14) should include the trailing zeros to account for the velocity part of the state

\[
H = [e_1 - e_2, e_1 - e_3, e_2 - e_3]^T = \begin{bmatrix}
1 & -1 & 0 & 0 & 0 \\
1 & 0 & -1 & 0 & 0 \\
0 & 1 & -1 & 0 & 0
\end{bmatrix}
\]

And the corresponding matrix \( H_0 \) for the Kalman filter with the velocity model included is

\[
H_0 = \begin{bmatrix}
-1 & 0 & 0 & 0 \\
0 & -1 & 0 & 0 \\
1 & -1 & 0 & 0
\end{bmatrix}
\]

References