Errata

In the article “Learning graphs from data: A signal representation perspective” [1] by X. Dong, D. Thanou, M. Rabbat, and P. Frossard in the May 2019 issue of IEEE Signal Processing Magazine, several statements were imprecise.

On page 47 of the article, in the paragraph below Eq. (4), the correct statements should be:

- The first term can be interpreted as the negative local log-likelihood of \( \beta_1 \);
- Finally, a connection between a pair of vertices \( v_i \) and \( v_j \) is established if either of \( \beta_{ij} \) and \( \beta_{ji} \) is nonzero, or both (notice that it should not be interpreted that \( \beta_{ij} \) and \( \beta_{ji} \) are directly related to the corresponding entries in the precision matrix \( \Theta \)). This neighborhood selection approach using the Lasso is intuitive with certain theoretical guarantees [14]; however, it does not involve solving an optimization problem whose objective is an explicit function of \( \Theta \).

On page 48 of the article:

- In Line 1 of the left column, it should be pointed out that the sample covariance in Eq. (5) is typically computed as \( \hat{\Sigma} = \frac{1}{M}XX^T \);
- Eq. (6) should be:

\[
\max_{\beta_1} \sum_{m=1}^{M} \log p_{\beta_1}(X_{1m}|X_{\setminus 1m}) - \lambda \lVert \beta_1 \rVert_1.
\]  

We regret these errors and apologize for any confusion they may have caused.

REFERENCES