



INFORMED SOURCE SEPARATION: A BAYESIAN TUTORIAL (TueAmOR5)

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*** Abstract :** Source separation problems are ubiquitous in the physical sciences; any situation where signals are superimposed calls for source separation to estimate the original signals. In this tutorial I will discuss the Bayesian approach to the source separation problem. This approach has a specific advantage in that it requires the designer to explicitly describe the signal model in addition to any other information or assumptions that go into the problem description. This leads naturally to the idea of informed source separation, where the algorithm design incorporates relevant information about the specific problem. This approach promises to enable researchers to design their own high-quality algorithms that are specifically tailored to the problem at hand.

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