

Structured Electronic Design

Information processing: Definitions

Architecture information processing system

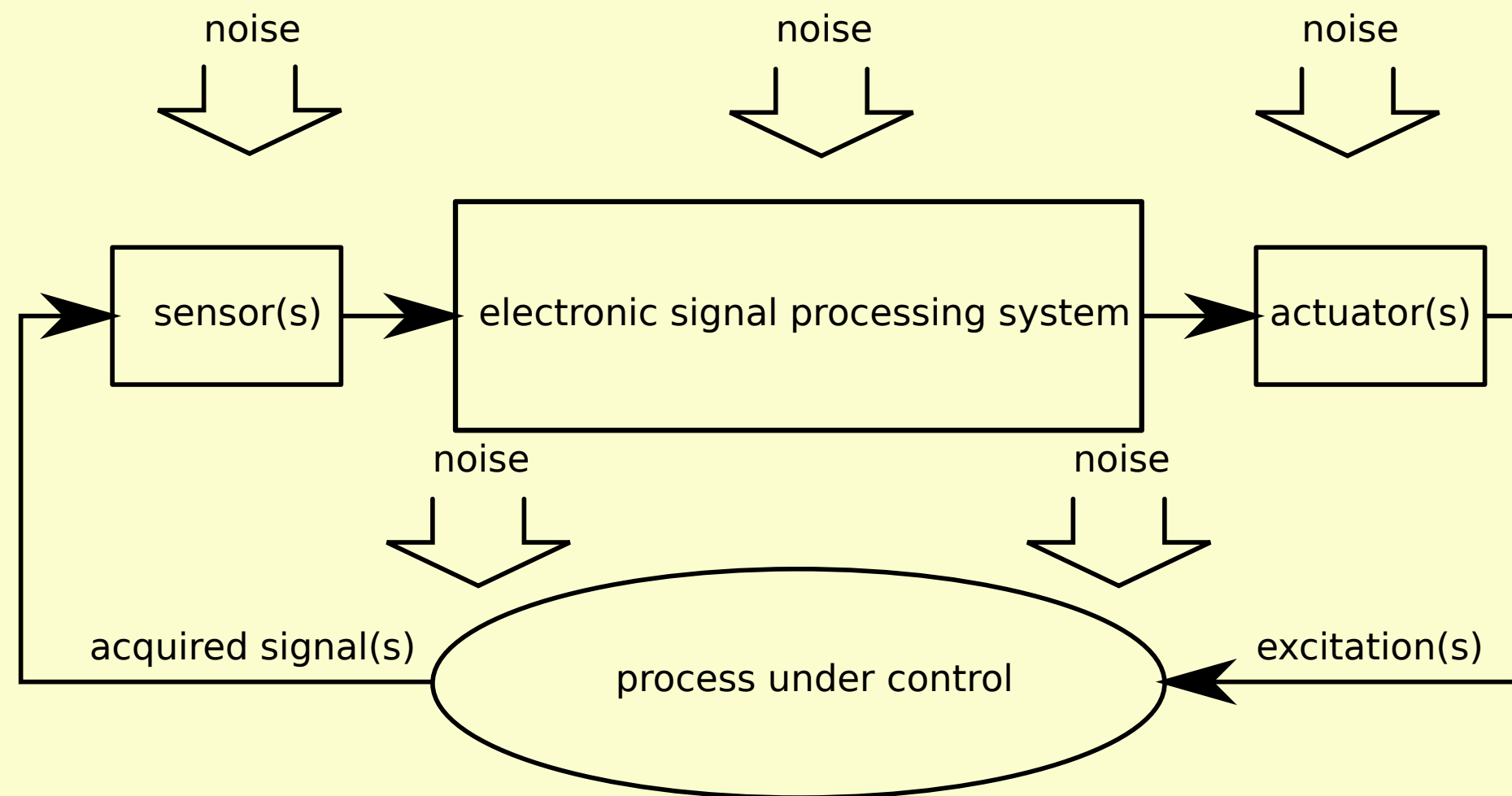
Architecture information processing system

Measurement and control system

Architecture information processing system

Measurement and control system

Signal processing in noisy environments

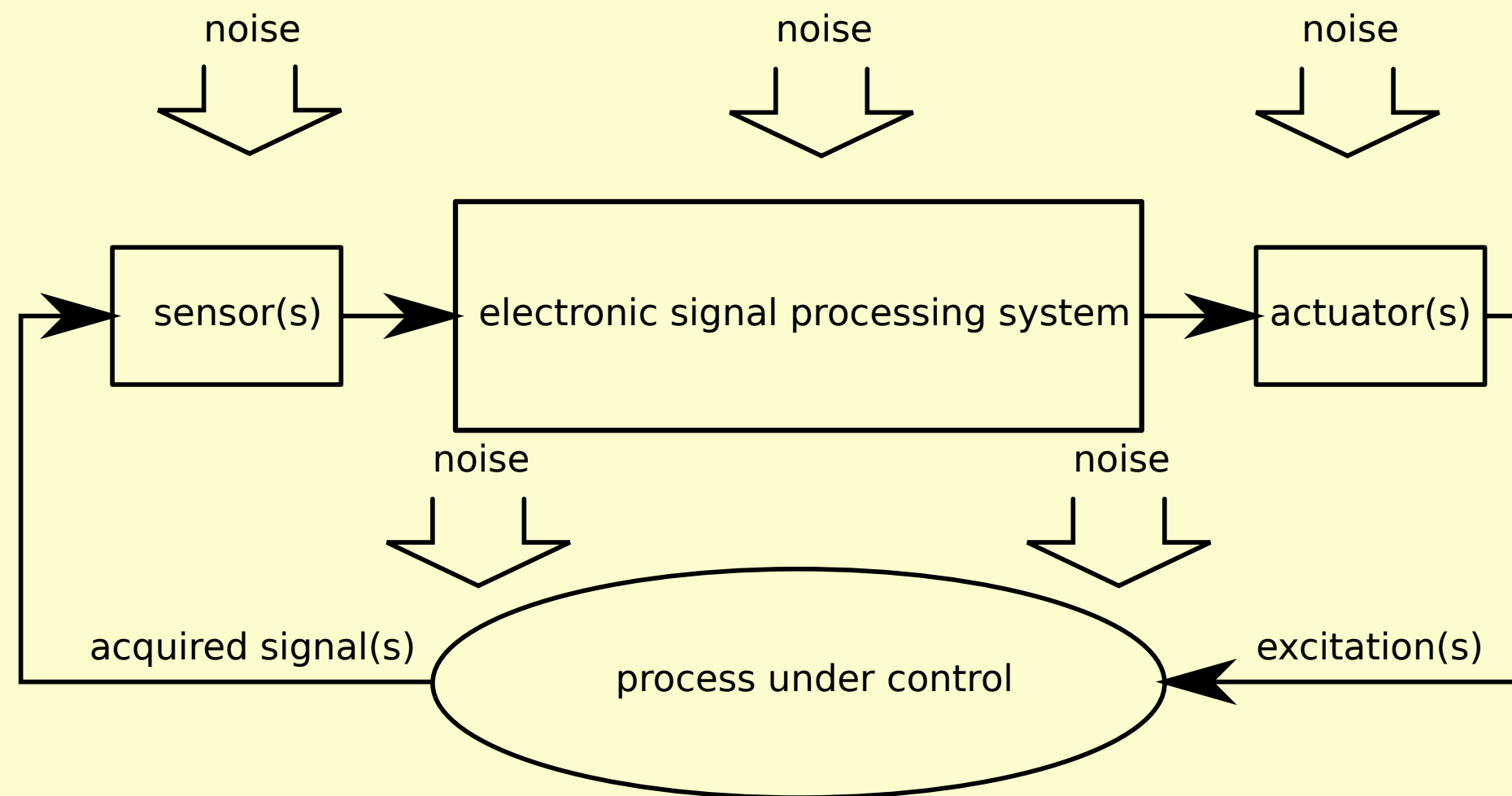


Architecture information processing system

Measurement and control system

Definitions

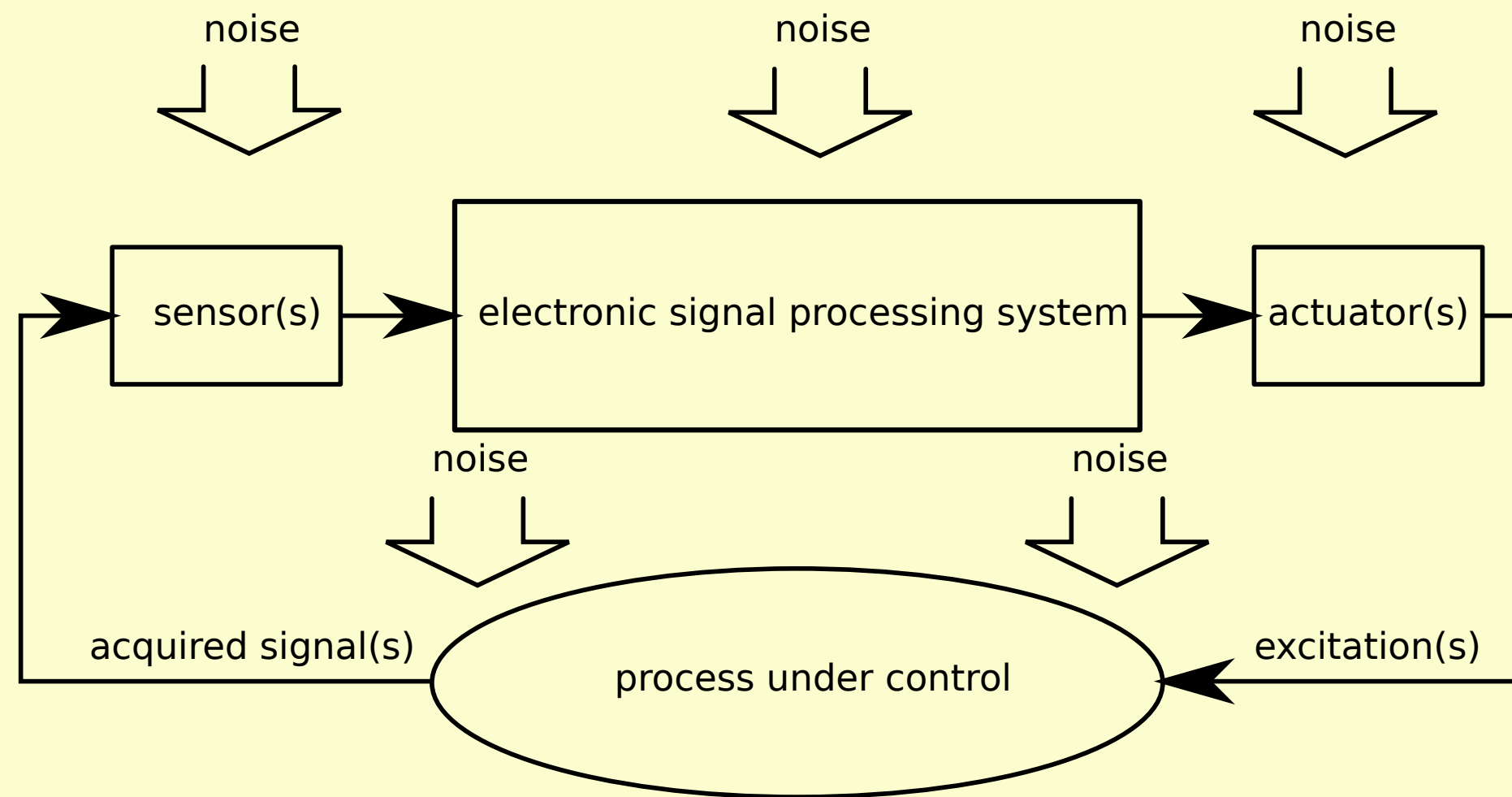
Signal processing in noisy environments



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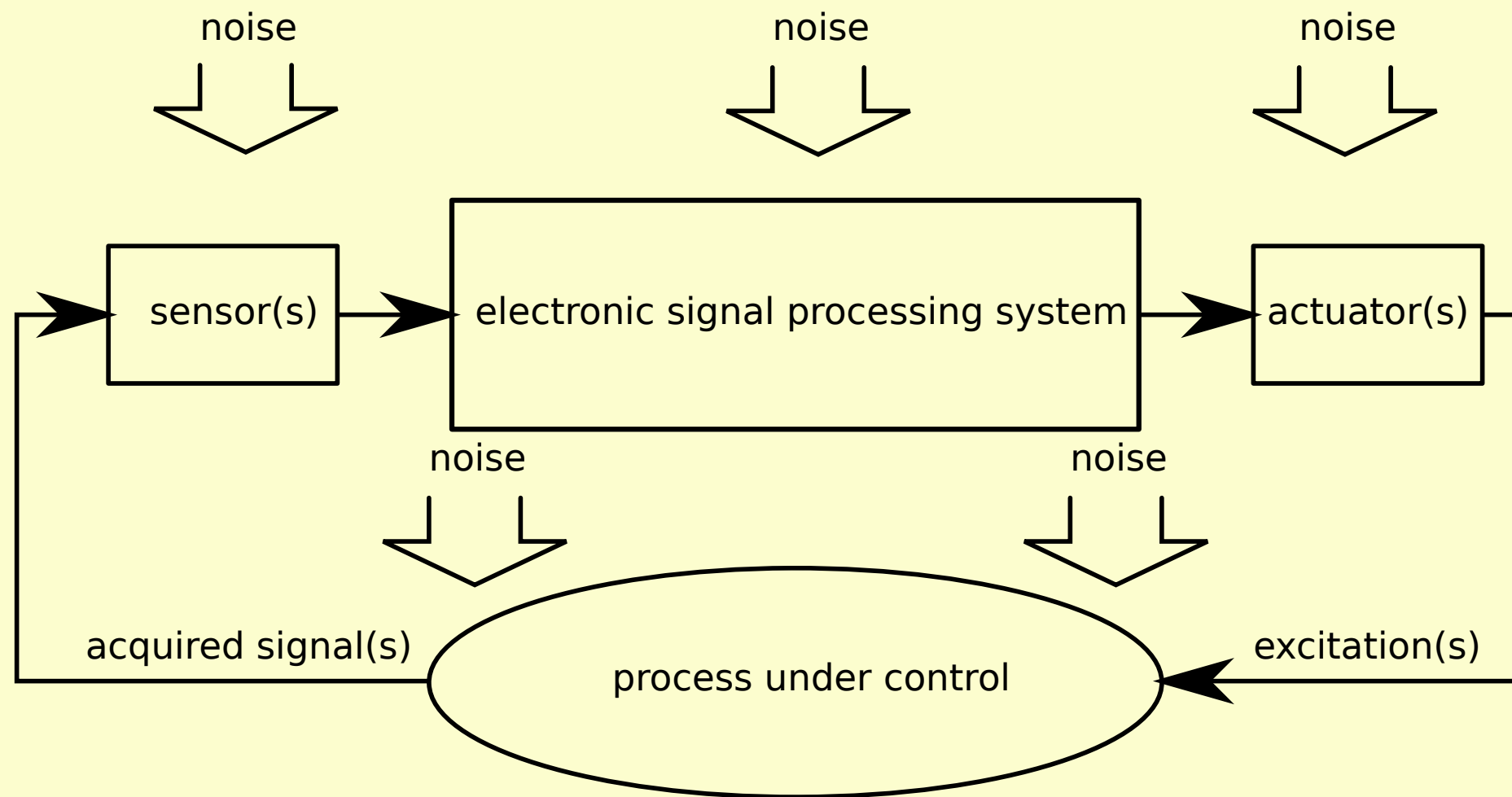
Signal

- a physical quantity that contains meaningful data

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Definitions

Signal

- a physical quantity that contains meaningful data

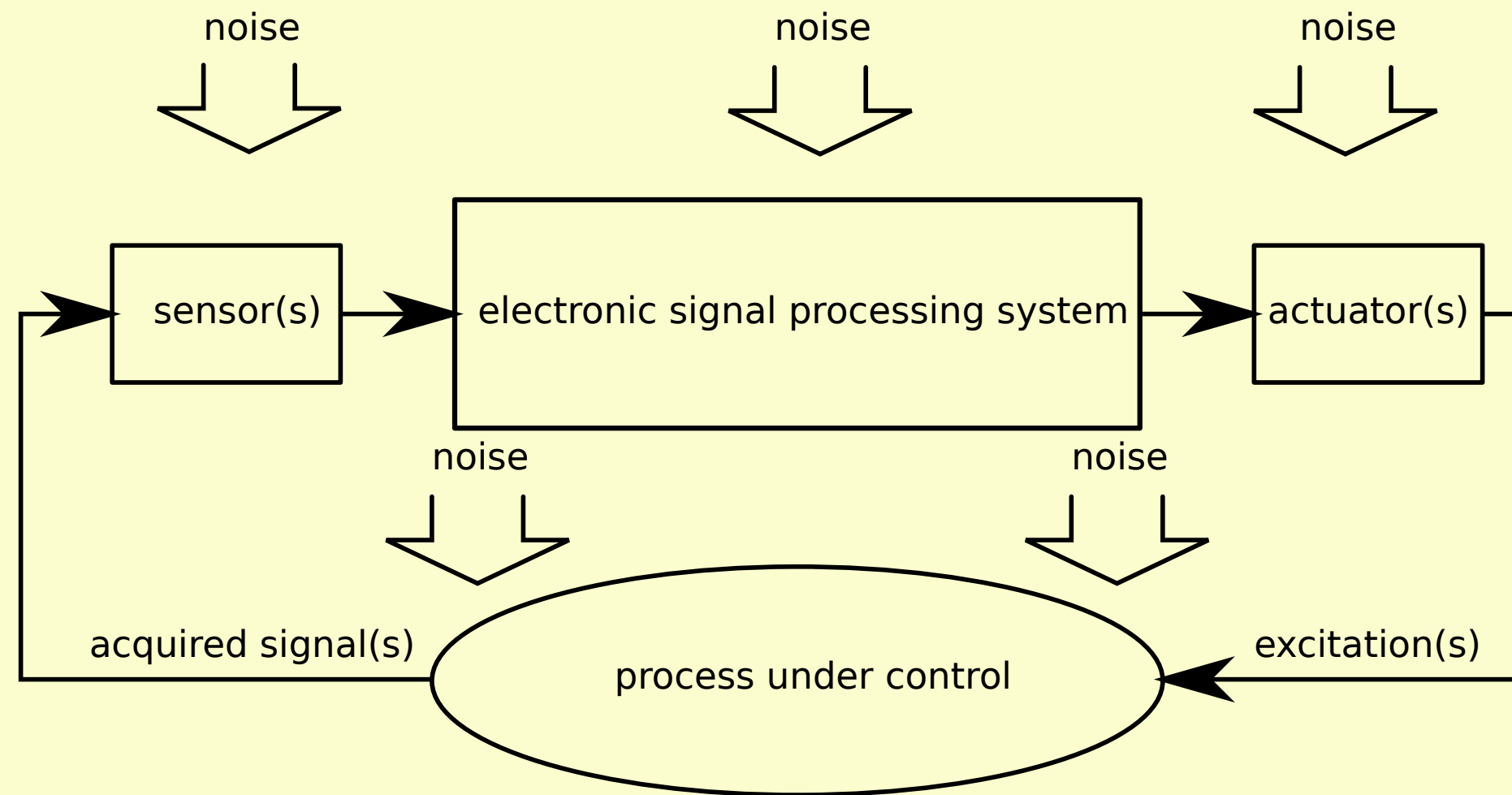
Data

- properties or details of a signal that represent the information

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Definitions

Signal

- a physical quantity that contains meaningful data

Data

- properties or details of a signal that represent the information

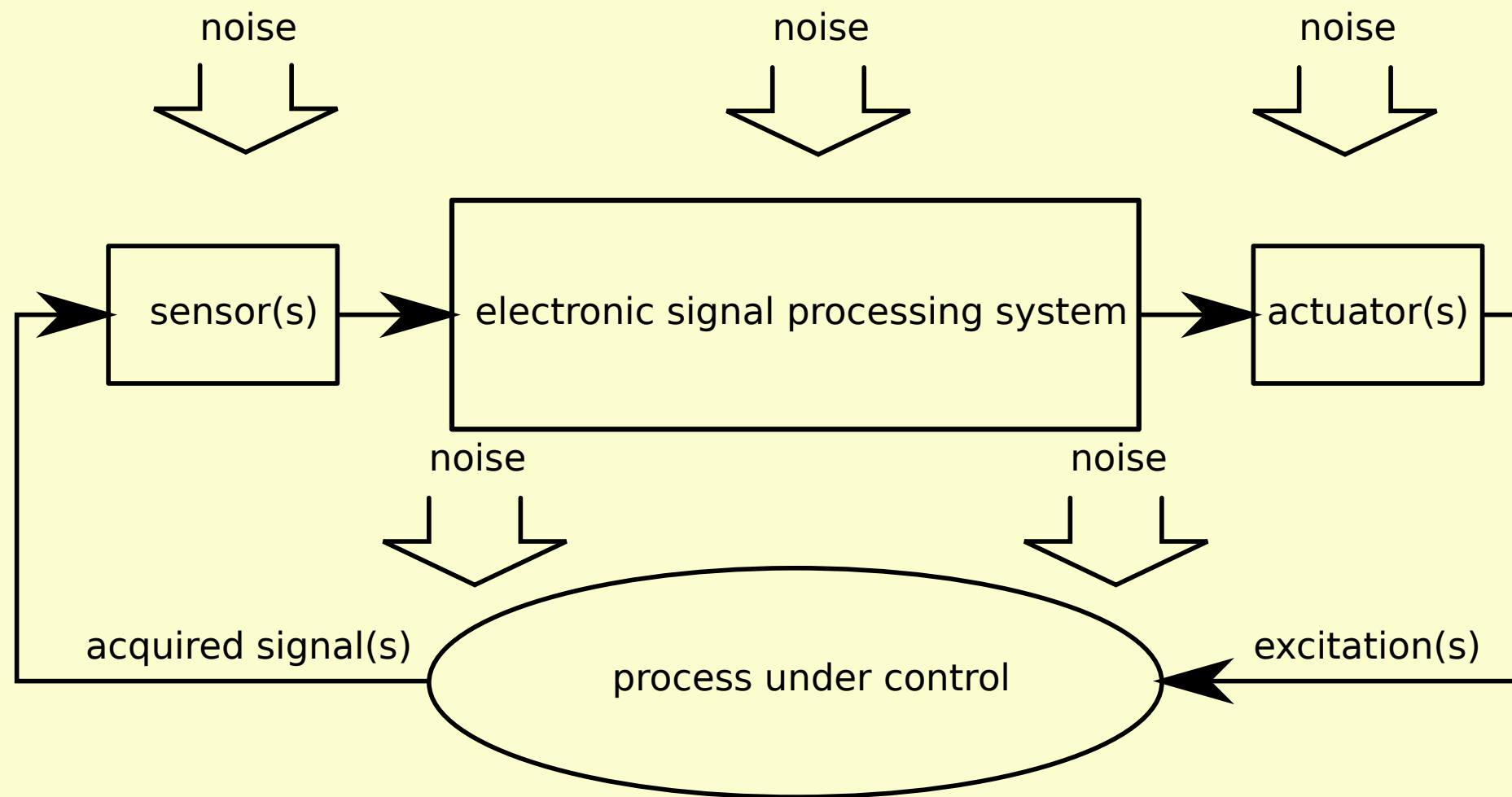
Noise

- a physical quantity whose data is meaningless

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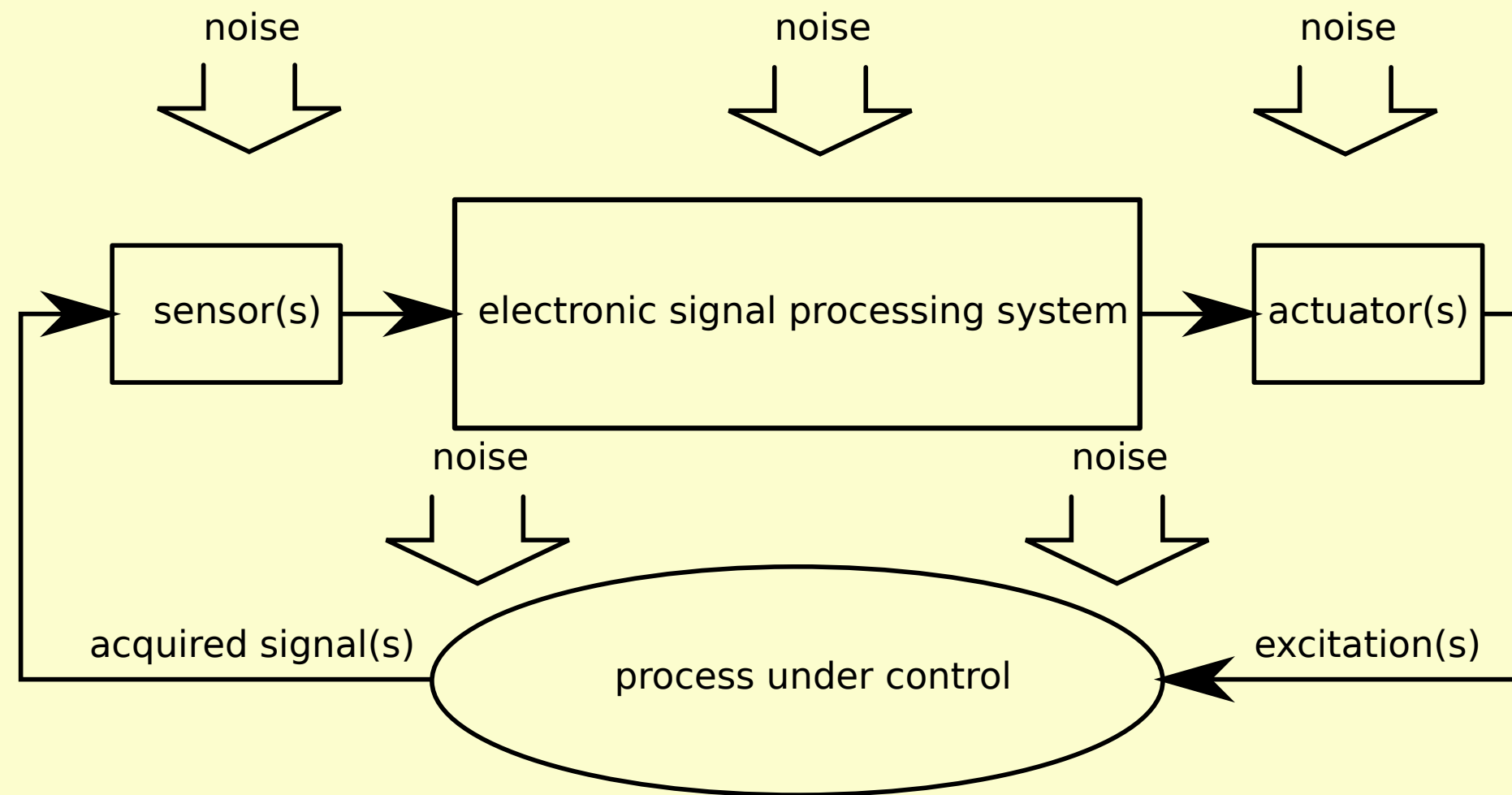
Information

- the meaning of the data

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Definitions

Signal

- a physical quantity that contains meaningful data

Data

- properties or details of a signal that represent the information

Noise

- a physical quantity whose data is meaningless

Information

- the meaning of the data

Signal processing

- Perform operations on a signal. Extract or modify the information contained in the signal.

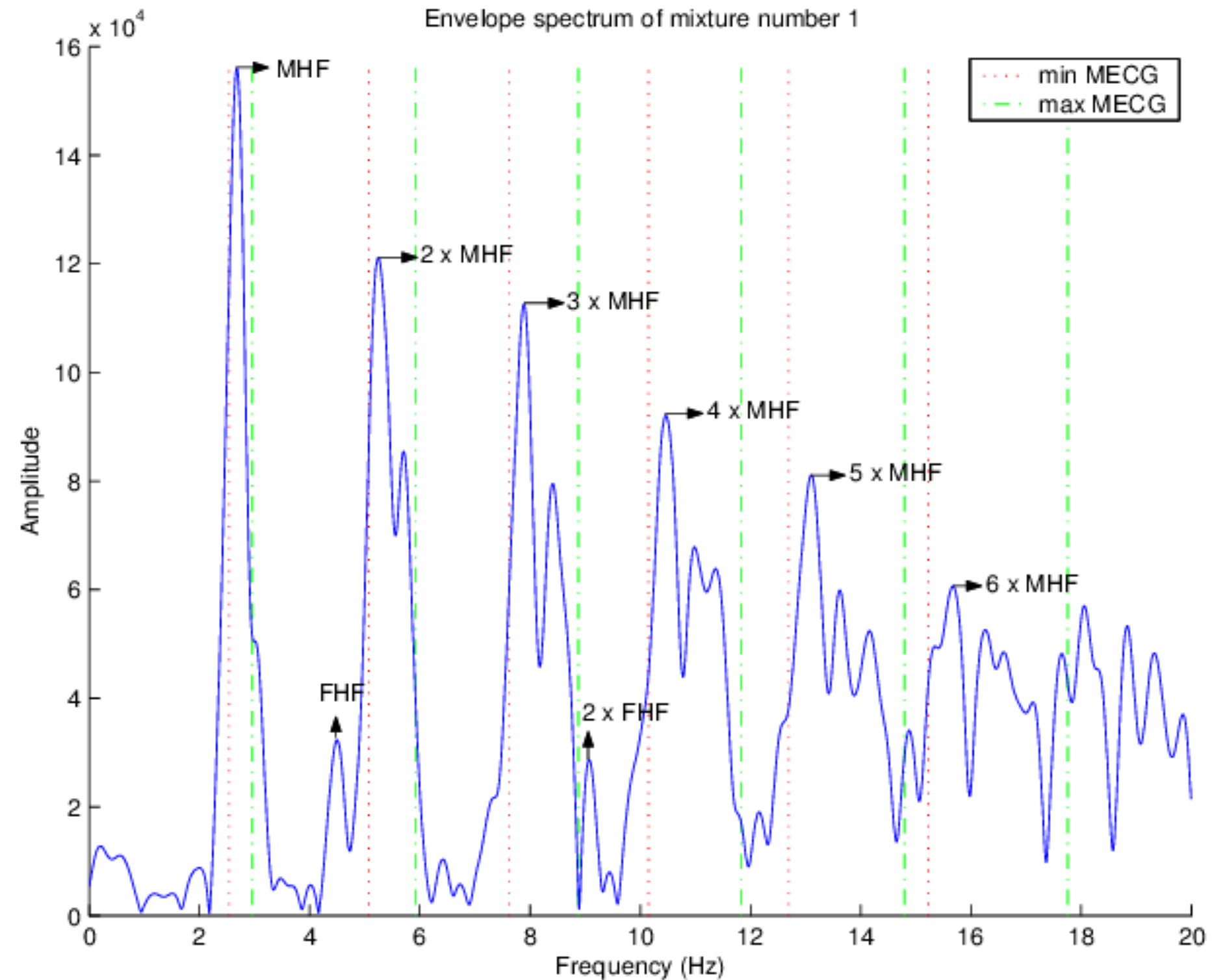
Information and noise

Mother's (MHF) and foetus' (FHF) heartbeat frequencies and their harmonics.

Source:

Michel Haritopoulos and Asoke K Nandi

Extraction of Foetal Contribution to ECG Recordings
Using Cyclostationarity-Based Source Separation
Method



https://www.researchgate.net/figure/Mothers-MHF-and-foetus-FHF-heartbeat-frequencies-and-their-harmonics-Theoretical_fig2_220848121