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Subject: Bazaar/STEM4U: Added Butterworth filter  
Posted by [koldo](#) on Thu, 17 Dec 2020 07:13:18 GMT

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The Butterworth IIR filter is a type of signal processing filter designed to have a frequency response as flat as possible in the passband. It is also referred to as a maximally flat magnitude filter. It was first described in 1930 by the British engineer and physicist Stephen Butterworth in his paper entitled "On the Theory of Filter Amplifiers"

These filter functions are templated and can be used with different vector types like U++ Vector<>, Eigen VectorXd and std::vector<>.

Its behaviour is equivalent to Matlab functions filter(), filtfilt() and butter().

Reference is here.

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