In this work, we summarize a method established in the published literature of dispersive construction of amplitude for the $\eta \to \pi\pi\pi$ decay process. We outline Chiral Perturbation Theory (ChPT) as an effective field theory for the description of low-energy hadron dynamics, and then introduce dispersive methods with the objective of constructing process amplitudes (up to the two-loop order) similar in form to ChPT predictions.

The original contribution of the present work is a software library implementing the "reconstruction procedure" that forms the basis for the dispersive construction of mesonic process amplitudes. This library can be used to construct amplitudes in a computer algebra system (CAS) environment, making those forms of amplitude available to fitting of experimental data and theoretical studies, especially those focusing on the extraction of the up/down quark mass difference.