

In my project I am writing code to find specific values of a function that has significance in number theory. I am doing this by using a database to find known values of one function, then using two important formulas to relate these values to the values that we are looking to find.

Sam Pease Senior Thesis

Computing Values of Symmetric Square L-Functions using Ichino's Pullback Formula

I am studying modular forms to write code to find values of their Lfunctions. I primarily use Ichino's generalization of Garrett's Pullback formula to write a restriction of a genus two Siegel modular form in terms of a linear combination of classical modular forms. By using a Modular Form Databases with the Fourier expansions of these modular forms we can isolate and find the coefficients in this pullback formula. These coefficients are significant as they are related to the symmetric square L-function values by work of Ichino.



ModularGroup-FundamentalDomain-01, created by Fropuff / CC BY-SA

