## THE QUANTUM SPACETIME SEMINAR SERIES

## Eigenvalue Equation for the Modular Graph $\mathrm{C}_{\mathrm{a}, \mathrm{b}, \mathrm{c}, \mathrm{d}}$

## Anirban Basu

HRI, Allahabad
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The modular graph $\mathrm{C}_{\mathrm{a}, \mathrm{b}, \mathrm{c}, \mathrm{d}}$ on the torus is a three loop planar graph in which two of the vertices have coordination number four, while the others have coordination number two. We obtain an eigenvalue equation satisfied by $C_{a, b, c, d}$ for generic values of $\mathbf{a}, \mathbf{b}, \mathbf{c}$, and d. This family of graphs arises in the calculation of one loop amplitudes in superstring theory.

