The Maaß space was discovered by numerical calculations.
L 78 Kurokawa published in Inventiones numerical examples for Hecke eigenvalues of Siegel modular forms of degree two. On the basis of his examples he and Saito conjectured the existence of a ~~Siegel~~ subspace in $S_k(\Gamma_2)$ which is Hecke-equivariantly isomorphic to $S_{2k-2}(\Gamma_1)$. Maaß, Zagier proved this conjecture, this was the hour of birth of the Jacobi forms.

To explain ~~these~~ consider the Fourier expansion of ~~expand~~ a Siegel modular form with respect to the variable τ', this is the so called Fourier Jacobi development:

$$F = \sum_0^\infty \varphi_m \, e^{2\pi i m \tau'}$$

Of course $\varphi_m = \sum_{n,r \in \mathbb{Z}} a_F(n,r,m)\, e^{2\pi i (n\tau + rz)}$.

Now F has by definition a certain automorphic behaviour with respect to Γ_2 and it is clear that therefore the $\varphi_m(\tau,z)$ must also show some automorphic behaviour with respect to some subgroup of Γ_2.
The official answer to this question is known and it runs as follows.

Let $\Gamma_1^J = \Gamma \ltimes \mathbb{Z}^2$. Then Γ_1^J acts on $\mathfrak{H} \times \mathbb{C}$ by

$$\left(\left(\begin{smallmatrix} a & b \\ c & d \end{smallmatrix}\right), (\lambda,\mu)\right)(\tau,z) = \left(\frac{a\tau+b}{c\tau+d}, \frac{z+\lambda\tau+\mu}{c\tau+d}\right)$$

and on functions $\phi(\tau,z)$ by

$$\phi|_{k,m}\left(\begin{smallmatrix} a & b \\ c & d \end{smallmatrix}\right) = \phi\left(\frac{a\tau+b}{c\tau+d}, \frac{z}{c\tau+d}\right) e^{2\pi i m \left(\frac{-cz^2}{c\tau+d}\right)}$$

$$\phi|_{k,m}(\lambda,\mu) = \phi(\tau, z+\lambda\tau+\mu)\, e^{2\pi i m(\lambda^2\tau + 2\lambda z)}$$

Here k, m are integers.