

The Kronecker Delta Function Song
Walter F. Smith, Spring 2002

$$\delta_{mn} = \begin{cases} 1 & \text{if } m = n \\ 0 & \text{if } m \neq n \end{cases}$$

G C D G
Leopold Kronecker said that God had

G C D G
Made the integers but nothing in between.

G C D G
The study of transcen-dental numbers was mad!

G C D G
And the irrationals, he thought they were obscene!

Em C D G
Although he was eccentric, old Leo was hero!

Em C D G
He studied elliptic functions, so they say.

Em C D G
But he did something else, and it equals one or zero--

Em C D G
It's the reason physicists remember him today!

G C D G
Kronecker delta functions are such fun --

G C D G
A little delta and a tiny m- n !

G C D G
If the subscripts are equal, the value is just one,

G C D G
But zero if they're different, let's sing the song again! (2X)
that's enough, this is the end! (last time)