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 С D G Leopold Kronecker said that God had G С D G Made the integers but nothing in between. G С G D The study of transcen-dental numbers was mad! G С G D And the irrationals, he thought they were obscene! Em C D G Although he was eccentric, old Leo was hero! Em С G D He studied elliptic functions, so they say. Em С D G But he did something else, and it equals one or zero--Em С D G

It's the reason physicists remember him today!

G С D G Kronecker delta functions are such fun --G C D G A little delta and a tiny m-n ! G С D G If the subscripts are equal, the value is just one, С G D G But zero if they're different, let's sing the song again! (2X) that's enough, this is the end! (last time)