

## Delta ( $\delta$ ) Method Dreaming

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Once upon a time late in December  
there happened something, I'll always remember

In Advanced Econometrics my Prof introduced  
the  $\delta$  method, which made me confused

He talked about consistence and standard normality  
but I myself couldn't relate that to reality

He mentioned  $\Sigma$ , parameters and derivations  
which we'd need for applications involving variance calculations

I read Hayashi, Hamilton and Greene in despair  
but did not find the answer, isn't that quite unfair!?

At X'mas eve I hadn't yet got the idea  
and went to bed this night with fear

Even trying hard I couldn't find sleep  
the question 'bout  $\delta$  was simply too deep

And suddenly, in the night's very middle  
there happened something, which solved the riddle

My dreams turned to  $\delta$  and sequence  $\{x\}$   
which is normal with  $\Sigma$ , I know by reflex

Plugging  $\hat{b}$  into  $a(\cdot)$ , that was our task  
but what happens to the variance?, poor students ask

And then in my dream it all became clear  
and was delivered at last from the  $\delta$  method fear

When I finally seized my Prof's suggestion  
and applied the method to exactly that question

Big A times  $\Sigma$  times big A of b prime  
here comes the new variance, neat and sublime

So what this piece of poetry means  
the best way to study, is listen to dreams!!