

Transcript

Live Video –Confidence Interval Applet

01. 00:03 / 00:09 - This little applet here, let's you pick a confidence limit. I'm going to stay with 95.
02. 00:09 / 00:14 - You don't really know what μ is or anything but you just sample. You can do one at a time.
03. 00:14 / 00:20 - You can see again, how does it vary? We're seeing the sample mean in red and then the
04. 00:20 / 00:26 - confidence interval. Or I can just say give me fifty and its keeping track of what percent
05. 00:26 / 00:32 - worked and what percent didn't. You can see that here's one that that missed it. Here's
06. 00:32 / 00:38 - another one that missed it. When I miss it, how far do I miss it by? Not very much. Right?
07. 00:38 / 00:44 - If I kept doing this, eventually I can probably get one that is a little bit crazy. But it
08. 00:44 / 00:49 - might... There's one that is a little bit crazy. Right? That I'm starting to be pretty
09. 00:49 / 00:55 - unhappy about if I'm trying to estimate this green line. But pretty rare. That one out
10. 00:55 / 01:02 - of 259 happened. That's the idea, the intervals are what is moving and we're using the width
11. 01:02 / 01:07 - of this picture to decide how wide the interval should be and then we're centering it around
12. 01:07 / 01:12 - our sample mean and using the fact that we know about the process to tell us how confident
13. 01:12 / 01:14 - we are that we are correct.