Hi Dustin,

Here are my slides. Thanks for your patience, I know I was supposed to send them on Friday!

--Yi-Kai

From: Jordan, Stephen P
Sent: Friday, January 15, 2016 2:29 PM
To: Moody, Dustin; Perlner, Ray; Liu, Yi-Kai; Peralta, Rene; Chen, Lily; Daniel C Smith (daniel-c.smith@louisville.edu) (daniel-c.smith@louisville.edu); Bassham, Lawrence E
Subject: Re: PQC Crypto Club Talk

That should work for me.

Best regards,

Stephen

From: Moody, Dustin
Sent: Thursday, January 14, 2016 10:50 AM
To: Perlner, Ray; Liu, Yi-Kai; Jordan, Stephen P; Peralta, Rene; Chen, Lily; Daniel C Smith (daniel-c.smith@louisville.edu) (daniel-c.smith@louisville.edu); Bassham, Lawrence E
Subject: PQC Crypto Club Talk

Everyone,

We're going to give the crypto-club talk on Feb. 3rd, at 10am, on our PQC project and its upcoming plans. I'm thinking we should plan for roughly 90 minutes of talking, which would leave ample time for questions. To ease the burden of preparing, I would like to break up the presentation, and have several of us give different parts of it. Here's my initial thought for how we could do this:

1) (10 min)   Yi-Kai   Introduction. Impact of quantum on PKC/NIST standards. What are quantum computers, Shor's algorithm, Grover's algorithm. What is post-quantum crypto. Difference with quantum crypto/QKD. NIST project/team. Why this all matters right

now. Then lead into broad overview of the main candidates.

2) (10 min)   Yi-Kai or Ray   Lattice-based crypto summary
3) (10 min)   Ray   Code-based crypto summary
4) (10 min)   Ray   Hash-based signatures
5) (10 min)   Rene   Multivariate crypto summary
6) (5 min)   Rene   Other candidates (isogeny-based, maybe braid groups?)
7) (5 min)   Rene   Overall summary. Our table of key sizes / timings. No obvious drop-in replacement. Which criteria are most important?
8) (10 min)   Stephen   State of quantum computing. Recent advances. Estimates of future progress (time/cost)
9) (20 min)   Dustin   NIST's plans. Workshop recap. NSA announcement. Transition importance. NISTIR. Call for Proposals. Evaluation criteria. Process. Timeline. How this will affect the group.

Does this make sense to everyone? Any suggestions. Yi-Kai, Ray, Rene, Stephen, are you good to cover these topics on Feb. 3rd? I think everyone should make their own slides using powerpoint, and then we can combine them all into one. I've attached a few resources that might be helpful. Also, on our wiki page we have slides from most of our past presentations: http://nistpqc.wikispaces.com/

Dustin