

From: [Miller, Carl A. \(Fed\)](#)
To: [Bienfang, Joshua C. \(Fed\)](#)
Cc: [Wayne, Michael \(Assoc\)](#)
Subject: Re: Carl Miller
Date: Friday, August 5, 2016 6:17:35 PM

Hi Josh —

It is great to be here. :) NIST seems like a great place for the kind of interdisciplinary research that I want to do. I'm looking forward to learning more about the current state of the Bell experiments & RNG. Bradley Christensen gave a talk about the NIST Bell experiment in Taiwan last year and I got to talk to him afterwards about the randomness angle. It will be great to find out more. I'll communicate with Michael and maybe you and I can talk after you get back.

-Carl

From: "Bienfang, Joshua C. (Fed)" <joshua.bienfang@nist.gov>
Date: Friday, August 5, 2016 at 11:05 AM
To: "Miller, Carl A. (Fed)" <carl.miller@nist.gov>
Cc: "Wayne, Michael (Assoc)" <michael.wayne@nist.gov>
Subject: Re: Carl Miller

Hi Carl,

Welcome! I'm happy you're at NIST! I'm on vacation right now but I look forward to connecting when I get back. You might be interested in the RNG we've developed for the Bell test. For low latency we apply no post-processing (hash, etc.), but rather applying weak feedback to eliminate slow drifts from the system. I've cc'd Michael Wayne, who's been building this system.

Best,
Josh

From: Miller, Carl A. (Fed)
Sent: Thursday, August 4, 2016 3:46 PM
To: Peralta, Rene (Fed); Kuo, Paulina (Fed); Nam, Sae Woo (Fed); Mink, Alan (Assoc); Bienfang, Joshua C. (Fed)
Subject: Re: Carl Miller

Hi folks —

It would be great to chat if you have time — Tuesday and Wednesday next week are both good days. (If you're tied up we can always try to connect later.)

-Carl

From: "Peralta, Rene (Fed)" <rene.peralta@nist.gov>

Date: Thursday, August 4, 2016 at 8:48 AM

To: "Kuo, Paulina (Fed)" <paulina.kuo@nist.gov>, "Nam, Sae Woo (Fed)" <saewoo.nam@nist.gov>, "Mink, Alan (Assoc)" <alan.mink@nist.gov>, "Bienfang, Joshua C. (Fed)" <joshua.bienfang@nist.gov>

Cc: "Miller, Carl A. (Fed)" <carl.miller@nist.gov>

Subject: Carl Miller

Hi Paulina, Alan, Sae Woo, Josh,

Carl Miller just joined the Computer Security Division. His areas of research include randomness and quantum information processing. In particular, he is interested in developing true quantum random number generators. Let us set up a meeting so that you can meet and have an experimentalists-mathematicians bonding (hmmm, will this pass the NIST email filters?).

Rene.