The Lightning Network that Akash discussed was very eye-opening, allowing for cross ledger transfers of assets. While this technology is certainly very interesting and definitely opens up blockchain to more people/use cases, there are certain limitations inherent in the technology.

As Dan discusses in his lecture, the Lightning Network is good for “small payments” where the economic cost for trusting other individuals is quite low. HLTCs can be leveraged to hold the value of intermediary exchange, ensuring that both parties are agreeing to the same terms and not getting stolen from. However, these HLTCs essentially hold money statically for 24 hours, creating illiquidity in the market and potential problems. The problems that may arise are the free option problem (people use their 24-hour window to wait for optimal exchange rates) and griefing attack (where people purposely route transactions to hold up liquidity to troll specific people), making the experience terrible.

What Dan introduces is the idea of using existing Interledger protocols to essentially build a better system. Already build into HLTCs is the trust that 50-cent HLTCs need not be held up between individuals since the economic cost of losing 50 cents is not that bad. So, leveraging this idea, Dan built proposes sending large transactions in these 50-cent increments through a multitude of various paths and nodes (similar to TCP/IP structures of the Internet), or greater increments if you trust the individual, instead of holding the market up through these illiquid 24-hour periods.

In all, I think it is a brilliant idea. The protocol discussed in Dan’s lecture brings together the advantages of the Lightning Network and helps solve the various issues that it brings.