

Empowering Anonymity: Delegatable Anonymous Credentials.



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- **Participants in a DelCred system:** authorities and users
- **What participants do:** anonymously obtain credentials from authorities, anonymously delegate credentials to other users, anonymously prove possession of credentials.
- **What was known:**
 - DelCreds for long delegation chains from Groth-Sahai NIZK proofs and structure-preserving sigs [BCKLS09,CKLM14]
 - DelCreds for short chains from general assumptions [CL06]
- **What is needed:**
 - Direct constructions that don't rely on NIZK
 - Incorporating credential attributes, conditional anonymity, revocation
 - Modular constructions from signature schemes with the “right” properties
- **Our results so far:**
 - Direct construction without NIZK [CL17]
 - Lends itself to attributes [CL17a]
 - New results on revocation of anonymous credentials [BCDLRSY17]