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## Applications of Polynomial Properties to Verifiable Delegation of Computation and Electronic Voting

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**Abstract:** This paper presents some proposals of protocols for two types of schemes such as verifiable delegation of computation and remote electronic voting, based on polynomial properties. Our protocols for verifiable delegation of computation are aimed to the efficient evaluation of polynomials, working on schemes where the polynomial and/or the input are kept secret to the server. Our proposal for remote electronic voting allows the verification of vote well-formation upon reception at the voting server, with little overhead of computations for the voter.

**Category / Keywords:** cryptographic protocols / delegation of computation, verifiable, electronic voting

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