Texas Tech University. Analysis Seminars.

## Condenser capacity and holomorphic functions. Part I.

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ABSTRACT. First we shall present some basic facts about condenser capacity, the Green function and their relation with holomorphic functions. Then we will state and prove an inequality for the capacity of a condenser via a holomorphic function, which takes into account the valency of the holomorphic function on the positive plate of the condenser. Also, we will present an equality statement and some related results. Finally, we will examine the asymptotic behavior of the capacity of the inverse image of a condenser under exponential Blaschke products and universal covering maps.