1067-39-2064Yongjae Cha* (ycha@math.fsu.edu), FSU Mathematics, 208 Love Building 1017 Academic Way,
Tallahassee, FL 32306. Local data of a Linear Difference Operator.

In a recent paper we gave an algorithm to find closed form solutions for linear recurrence equations. The key ingredient needed for this algorithm is local data at singularities. The topic of this talk will be how to compute this local data which involves computing valuation, Newton polygon and indicial equation of a linear difference operator. (Received September 22, 2010)