Es sei: $1 \leq i \leq K-1$:

$$\tilde{\lambda}_i = \tilde{\lambda}_i + \sum_{j=1}^{K} \tilde{\lambda}_j \tilde{r}_{ji} = \lambda_i + \sum_{j=1}^{K-1} \tilde{\lambda}_j \tilde{r}_{ji} + \tilde{\lambda}_K \tilde{r}_{Ki}$$

$$= \lambda_i + \sum_{j=1}^{K-1} \tilde{\lambda}_j r_{ji} + \tilde{\lambda}_K \frac{\sum_{k=K}^{J} \lambda_k r_{ki}}{\sum_{k=K}^{J} \lambda_k}$$

$\tilde{\lambda}_i = \lambda_i$ einsetzen :

$$\lambda_i = \lambda_i + \sum_{j=1}^{K-1} \lambda_j r_{ji} + \sum_{k=K}^{J} \lambda_k r_{ki}$$

$$= \lambda_i + \sum_{j=1}^{J} \lambda_j r_{ji} \quad \checkmark$$

Es sei: $i = K$:

$$\tilde{\lambda}_K = \tilde{\lambda}_K + \sum_{j=1}^{K} \tilde{\lambda}_j \tilde{r}_{jK}$$

$\tilde{\lambda}_K, \tilde{\lambda}_j$ einsetzen :

$$\sum_{k=K}^{J} \lambda_k = \sum_{k=K}^{J} \lambda_k + \sum_{j=1}^{K-1} \left(\lambda_j \sum_{k=K}^{J} r_{kj} \right) +$$

$$+ \left(\sum_{k=K}^{J} \lambda_k \right) \cdot \frac{\sum_{k=K}^{J} \left(\lambda_k \sum_{j=K}^{J} r_{kj} \right)}{\sum_{k=K}^{J} \lambda_k}$$

$$= \sum_{k=K}^{J} \left(\lambda_k + \sum_{j=1}^{J} \lambda_j r_{jk} \right)$$

$$= \sum_{k=K}^{J} \lambda_k \quad \checkmark$$