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$$I_{\underline{n}}$$
  $I_{\underline{O}}$   $\underline{A}$   $\underline{A}$   $\underline{A}$ 

$$\mathbf{y} \quad \mathbf{W}\mathbf{x}, \quad \mathbf{x} \in \mathbb{R}^m, \quad \mathbf{y} \in \mathbb{R}^n, \quad \mathbf{W} \in \mathbb{R}^{m \times n},$$

W Α , . . n Л J J Л . Л Л n . A  $n \times n$ A 'A A JO m. . , . . . . , , ff A. \_ . . **Z**, ١ , л

$$J \quad -H \mathbf{y} - \sum_{i=1}^n \int p \mathbf{k} \mathbf{y}_i \mathbf{W} \quad , \ p_i \ y_i \ dy_i,$$

Y. Hao et al. (Eds.): CIS 2005, Part I, LNAI 3801, pp. 915–920, 2005. © Springer-Verlag Berlin Heidelberg 2005

л. л. Å. ň . . . . , I A . . . Л Х **,**Z Οn . . *\_* . . A n n . Л. . . *I*i n л. , , . Л , ,σ. ľ Л . / A , . 1 . A A. ' A n Ŗ A JO L ,',-· · л'. л' . Л. ľ n n . n Io . <u>n</u> . л , · • , -.  $\mathbf{J}_{\mathbf{O}}$ . n . л n ñ ñ . л л . 1 . Jo \_ a Jo ľ , A. . . *K* ' д, Л · . Ä, Ľ1 л. Л ň n ' . . л Л. Z, Л .n . Л Л Л ' A Л . . л Х л л Іо , Х ,,--, л. . ι., . . . Л Л . . . . ľ . J

 $p_{\text{super}} u = \frac{\pi}{\pi} u , \qquad p_{\text{sub}} u = p_{N(1,1)} u = p_{N(-1,1)} u .$ 

$$\alpha_i \quad \frac{\gamma_{i1}}{\gamma_{i1}}, \quad \beta_i \quad \frac{\gamma_{i2}}{\gamma_{i1}}, \quad \gamma_{i2},$$

 $\mathbf{n}, \alpha_i, \beta_j, \dots, \mathbf{n}, \gamma_i, \gamma_{i2}, \dots, \mathbf{n}, \gamma_i, \gamma_{i2}, \dots, \mathbf{n}, \gamma_i, \gamma_{i2}, \dots, \mathbf{n}, \gamma_i, \gamma_{i2}, \dots, \mathbf{n}, \mathbf{n},$ 

$$\Delta \mathbf{W} = \eta \begin{bmatrix} \mathbf{I} & \boldsymbol{\Phi} \ \mathbf{y} \ \mathbf{y}^T \end{bmatrix} \mathbf{W}.$$

 $\boldsymbol{\pi}$   $\boldsymbol{\eta}$   $\boldsymbol{\pi}$  . ,  $\boldsymbol{\Phi}$   $\mathbf{y}$  ,  $\phi_1$   $y_1$  ,  $\cdots$  ,  $\phi_n$   $y_n$  .  $^T$  .

$$\phi_i \ y_i \qquad \frac{p'_i \ y_i, \gamma_i}{p_i \ y_i, \gamma_i} \qquad \frac{\alpha_i p'_{\text{super}} \ y_i \qquad \beta_i p'_{\text{sub}} \ y_i}{\alpha_i p_{\text{super}} \ y_i \qquad \beta_i p_{\text{sub}} \ y_i}$$

.  $\vec{n}$  .  $\vec{n}$  .  $\vec{n}$  .  $\vec{n}$  .  $\vec{n}$ 

$$\Delta \gamma_{i1} \quad \eta \frac{\partial}{\partial \gamma_{i1}} \left( \sum_{l=1}^{n} \cdot p_l \ y_l, \gamma_l \right)$$

$$\eta \frac{p_{\text{super } y_i} - p_{\text{sub } y_i}}{\alpha_i p_{\text{super } y_i} - \beta_i p_{\text{sub } y_i}} \cdot \frac{\gamma_{i1}}{\alpha_i p_{\text{super } y_i} - \gamma_{i2}}^{2}$$

$$\eta \frac{p_{\text{super } y_i} - p_{\text{sub } y_i} \alpha_i \beta_i}{\alpha_i p_{\text{super } y_i} - \beta_i p_{\text{sub } y_i}}$$

$$\mathbf{x} \mathbf{x} \cdot \mathbf{$$

$$\mathbf{W}^{(k+1)}$$
  $\mathbf{W}^{(k)}$   $\Delta \mathbf{W}$ ,  $\gamma_{ij}^{(k+1)}$   $\gamma_{ij}^{(k)}$   $\Delta \gamma_{ij}$ .

## 2.2 Mixed Translated Super-Gaussian Model Pdf

n I  $p_i y_i - \pi^2 y_i \quad \theta_i - \pi^2 y_i - \theta_i$ θ.л. . . . . л. .  $\theta_i \geq$ ľ *n. '* Л . л. Дл  $T_{A}$ *I*i W Л  $\phi_i y_i \qquad \frac{- \mathbf{n}^2 y_i \quad \theta_i \quad \mathbf{n} y_i \quad \theta_i \quad \mathbf{n}^2 - y_i \quad \theta_i \quad \mathbf{n} - y_i \quad \theta_i}{\mathbf{n}^2 y_i \quad \theta_i \quad \mathbf{n}^2 y_i - \theta_i}$ . A...  $\gamma_i$  . A.  $\Delta \gamma_i = \eta \frac{\partial}{\partial \gamma_i} \left( \sum_{i=1}^n \cdot \left\{ - \pi^2 y_i - \gamma - \pi^2 y_i - \gamma \right\} \right)$  $- \eta \theta_i \frac{\mathbf{n}^2 y_i \quad \theta_i \quad \mathbf{n} \quad y_i \quad \theta_i \quad \mathbf{n}^2 - y_i \quad \theta_i \quad \mathbf{n} \quad -y_i \quad \theta_i}{\mathbf{n}^2 \quad y_i \quad \theta_i \quad \mathbf{n}^2 \quad y_i - \theta_i}.$ n Jo Е. л  $\chi^2$  .  $\pi$  . . л. . U\_ , . . А On  $\beta$ ,  $\beta$ .,  $\cdot$ . nЛ .N  $\eta$  . ,  $\mathbf{W}$  . A . Л.Л. n  $p_i y_i, \gamma_i$ n.  $\mathbf{I}_{\mathtt{A}}$ '.' A  $\mathbf{M} \mathbf{W}_1$  $\mathbf{\tilde{W}}_{2}$ , **Т t** ' ' А.  $\mathbf{W}$  , Л -0.0125 -0.0100 -0.0283 -0.0027-0.0041-0.0145-1.4867 $\mathbf{W}_{1}\mathbf{A} = \begin{bmatrix} -0.0143 & 0.0021 & 0.0087 & -1.5540 \\ -0.0143 & 0.0021 & 0.0087 & -1.5540 \\ \hline 1.7166 & -0.0193 & 0.0159 & -0.0190 \\ -0.0179 & 0.0006 & \hline 1.6702 & -0.0203 \\ 0.0149 & \hline 1.5592 & -0.0202 & 0.0055 \\ -0.0009 & -0.0204 & -0.0336 & 0.0018 \\ \hline \end{bmatrix}$ 0.0034 -0.0366-0.0077-0.00740.0333 0.0066 0.03870.0075-0.01110.00240.00900.01680.0018 -1.4433 -0.00600.0083-0.0188 -0.0048 -0.0157 -0.0015-0.0143-1.4397-0.0162

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	-0.9769	-0.0094	0.0078	-0.0027	0.0303	0.0178	0.019	3
	-0.0190	-0.0021	-0.0117	-0.0161	-1.4425	-0.0165	-0.004	5
	-0.0046	-0.0027	-0.0072	0.0052	-0.0062	-0.0150	-1.7547	7
$\mathbf{W}_{2}\mathbf{A} =$	-0.0061	-0.0002	0.9820	-0.0131	0.0217	0.0241	0.019	9
	0.0159	-0.0045	-0.0258	0.9444	0.0186	0.0213	0.044	3
	-0.0203	-0.0220	0.0010	-0.0054	-0.0098	1.2511	-0.009	5
	0.0271	0.9799	-0.0113	0.0030	-0.0008	-0.0176	-0.051	0
			- Ia		87	w	<b>a</b> 7	
WA AP			A .O		л.	••	л ж	٨Þ
		• · ·	. ,	•			1 1	
diag $\lambda_1, \lambda_2, \cdots, \lambda_n$ .		л. л	$\lambda_i$ /	. P	•	•	,	
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http://www-bcl.cs.may.ie/~bap/demos.html

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![](_page_5_Figure_1.jpeg)