

## J Yfa ]gghYf 'Hfc]gXcfZYf 'GYb]cfYb'\_Y\fh g]WX Yf 'bUWX' < Ui gY 'ni fØW\_°

8]Y<sup>2</sup> ZZYbh`]WX\_Y]hgZU\bXi b[ 'bUWX 'XYa '++!'À\f][ Yb J Yfa ]gghYb'Ui g'Hfc]gXcfZ'k ]fX'Y]b[ YghY``h' 'Yf'\_Y\fhY k c\`VY\U`hYb'ni fØW\_"



 $\label{thm:linear} Hfc]gXcfZ\~z^8Yi hgWX^UbX^!^8]Y^Dc^]nY]^[]Vh^k]Wkh][Y^BYi][_Y]hYbnif^JYfa]gghYbaY^Xib[_Y]bYg^++!^A\f][Yb^GYb]cfg^Uig^Hfc]gXcfZVY_Ubbh^*^GY]h^XYa^'\%''^AU]^*&$&)^kifXY^X]YgYf^U^g^jYfa]ggh[YaY^XYh^*^XcWk^bib^]gh^X]Y^9f^Y]WkhYfib[^[fc*.^8Yf^GYb]cf^]ghkc\^VY\U^hYb^ibX^Y][YbghAbX][^bUWk^<UigY^nif@W_[Y_Y\fh''^$ 

8]Y'Dc`]nY]'VYXUb\_h'g]W\'\Yfn`]W\'VY]'XYf'6Yj Ò`\_Yfi b['ZØf'X]Y
I bhYfghØhni b['VY]'XYf'Gi W\Y'i bX'V]hhYh'XUfi a ž'X]Y
JYfa ]gghYba Y`Xi b['b]W\h'k Y]hYf'ni 'j YfVfY]hYb'i bX'j cf\UbXYbY
6]`XYf'cXYf'dYfgcbYbVYnc[YbY'8UhYb'i a [Y\YbX'ni '`ÒgW\Yb"'9]b
[`ØW\_`]W\Yg'9bXYž'XUg'<cZZbi b['i bX': fYi XY'Vf]b[h°

8 YhU]`g	
JcfZU``	Gcbgh][Yg
Cfh	Hfc]gXcfZž8Yi hgWX`UbX

## 6 Ygi WX Yb 'G]Y 'i bg 'Ui Z. 'b!U[ "bYh