

Figure 1  
Schematic reproduction  
of SDCM Swallowtail in a  
3/4 resonance region.

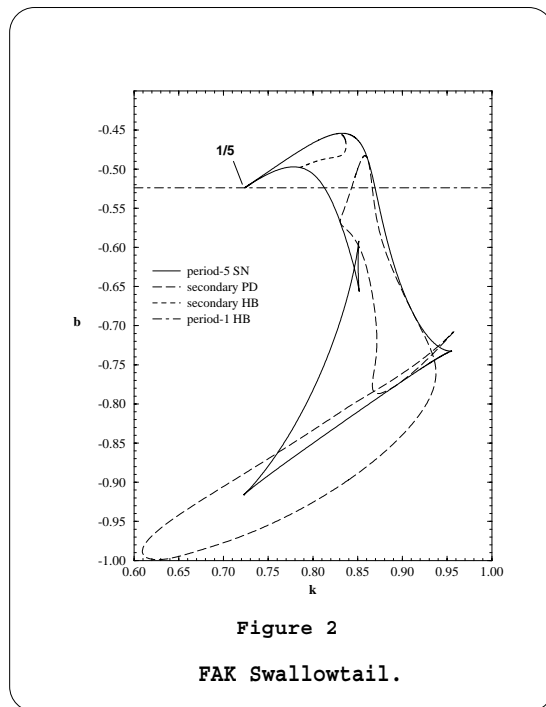


Figure 2  
FAK Swallowtail.

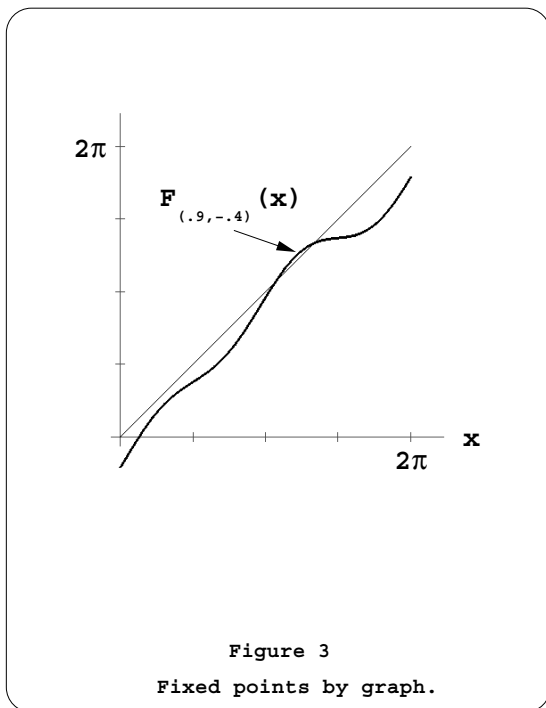


Figure 3  
Fixed points by graph.

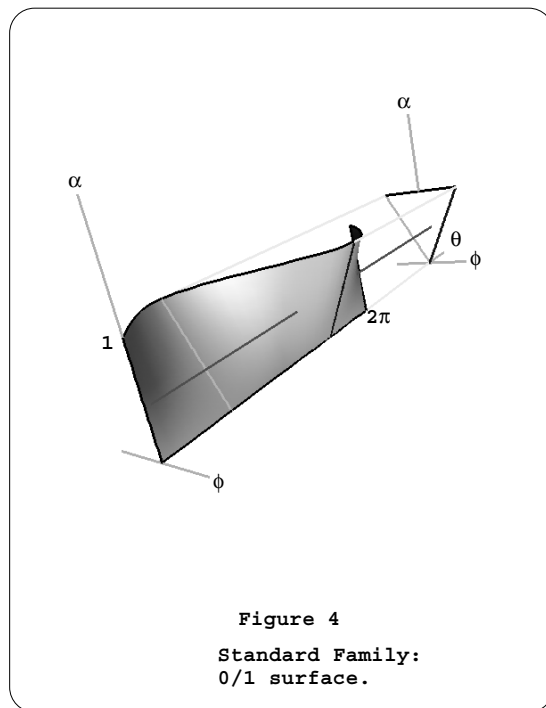


Figure 4  
Standard Family:  
0/1 surface.

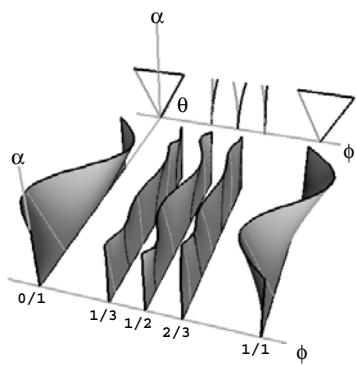


Figure 5  
Standard Family:  
several surfaces.

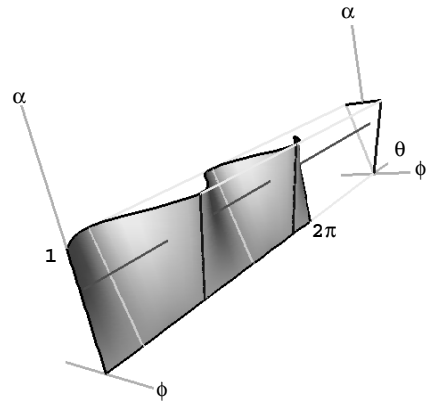


Figure 6  
Coincident Projections.

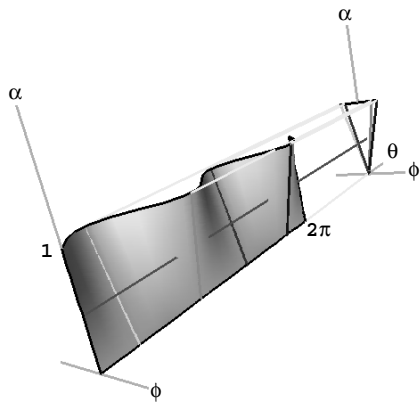


Figure 7  
Noncoincident  
Projections.

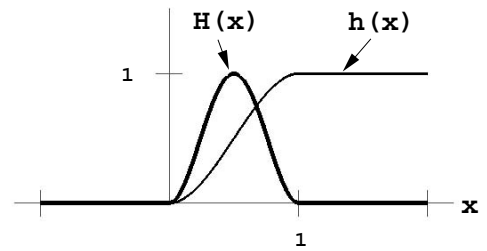


Figure 8  
Bump functions.

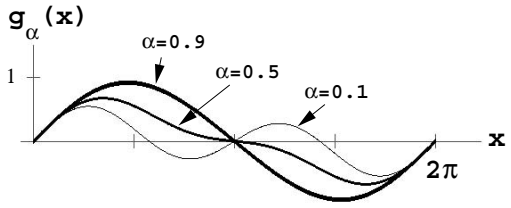


Figure 9a  
Single flame.

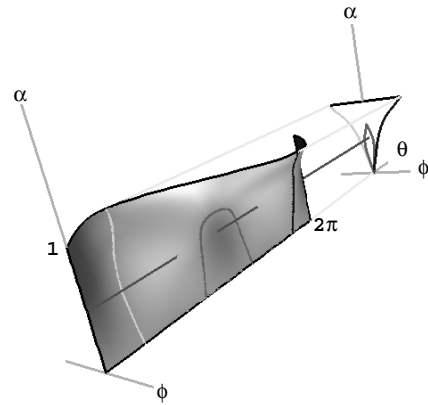


Figure 9b  
Single Flame.

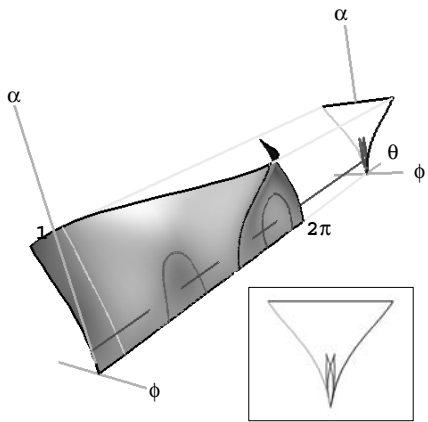


Figure 10  
Double Flame.

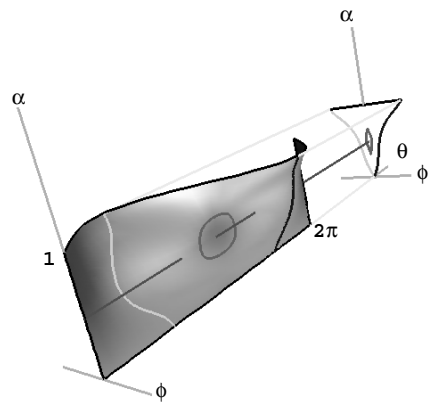


Figure 11  
Center Fold.

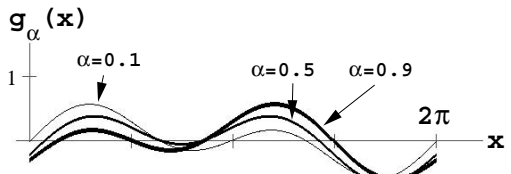


Figure 12a  
Left-side crossing.

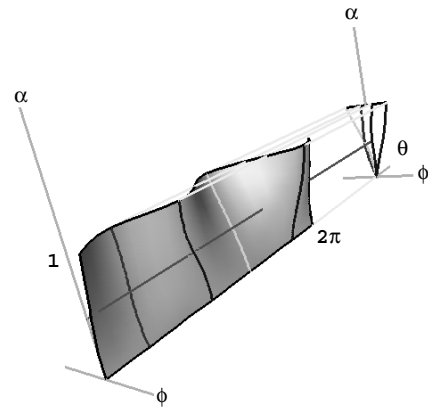


Figure 12b  
Left-side crossing.

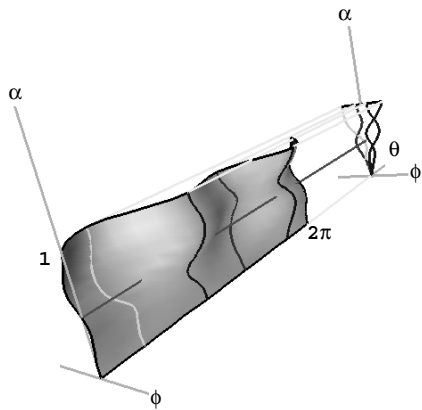


Figure 13  
Full Twist.

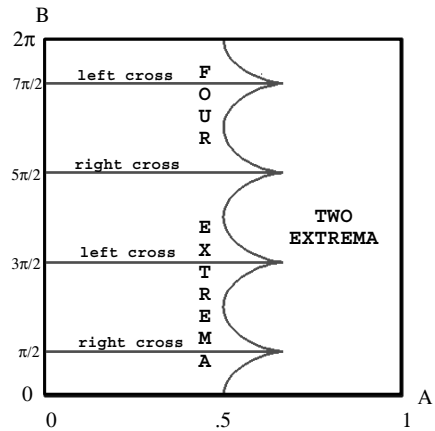


Figure 14a  
The two mode parameter space.  
 $((1-A)/2) \sin(2x) + A \sin(x + B)$

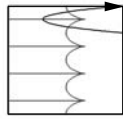


Figure 14b  
The Swallowtail path.

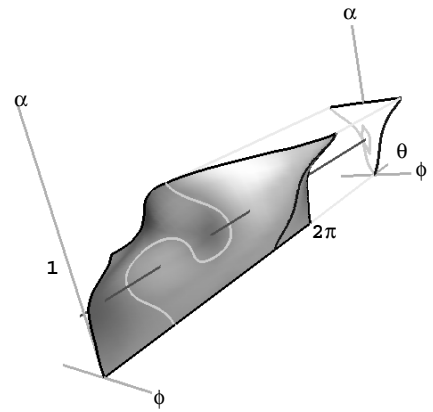


Figure 15  
Left-edge Swallowtail.