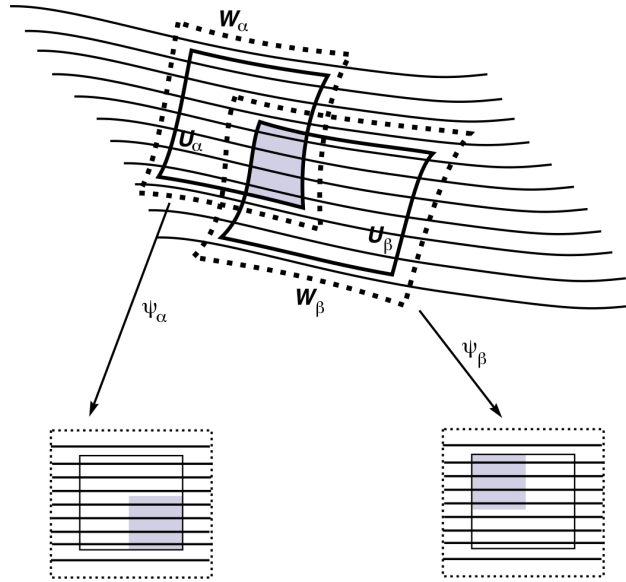


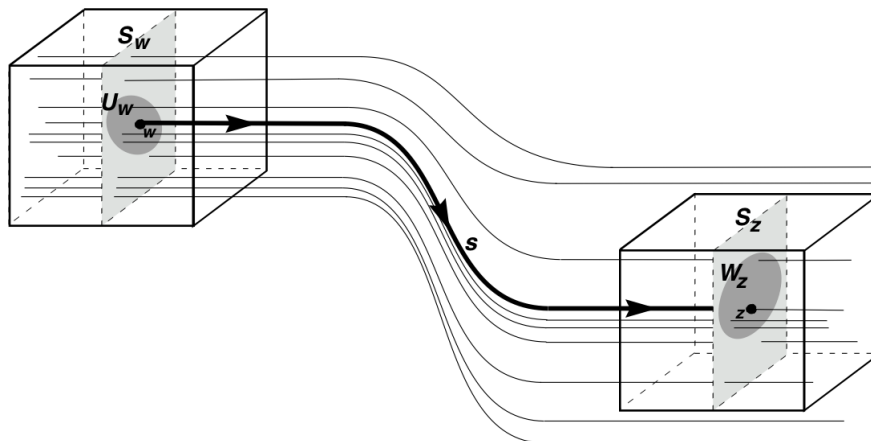
## SOME IMAGES OF FOLIATIONS

Below is a collection of images of foliations in two and three dimensions, with brief explanations. All images were made by Larry Conlon on a NeXT Computer in 1994, except the last which was produced by Takashi Tsuboi on a Silicon Graphics workstation.

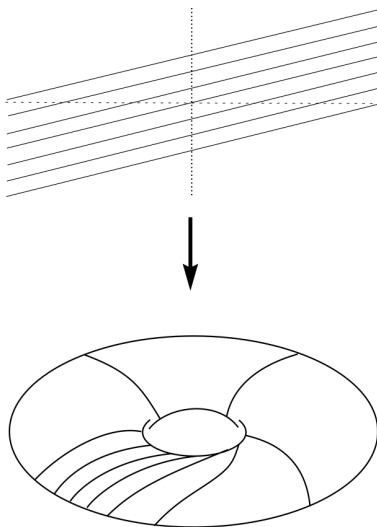
**EXAMPLE 0.1** *The generators of holonomy.* This is a very simple picture, showing the overlap of two foliation charts for a foliation of the plane.



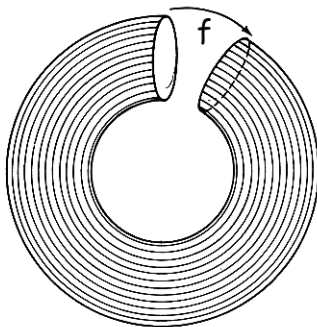
**EXAMPLE 0.2** *The holonomy along a path.* This is another simple picture, suggesting how the holonomy is determined by a path in a leaf.



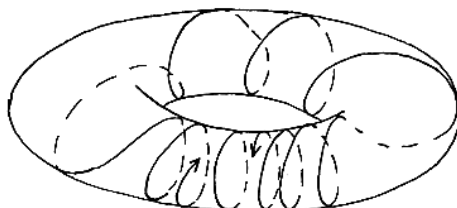
**EXAMPLE 0.3** *The linear foliation on  $\mathbb{T}^2$ .* This is the canonical picture of the foliation by lines of the 2-torus, viewed as a quotient of the foliation of the plane  $\mathbb{R}^2$  by the integer lattice  $\mathbb{Z}^2$ .



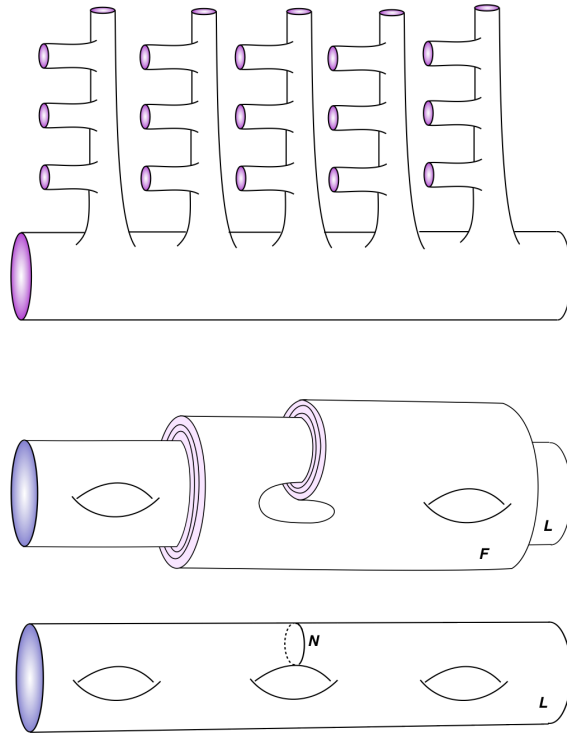
**EXAMPLE 0.4** *A foliation on  $\mathbb{T}^2$  obtained by gluing.* The behavior of the leaves is determined by the gluing map  $f : \mathbb{S}^1 \rightarrow \mathbb{S}^1$ .



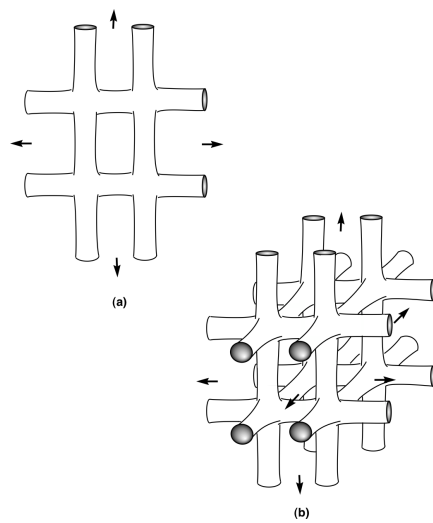
**EXAMPLE 0.5** *A proper foliation on  $\mathbb{T}^2$ .* A foliation is proper if each leaf is a proper submanifold. In this example, the non-compact leaves all spiral in on a circle. There is one minimal set – the circle leaf.



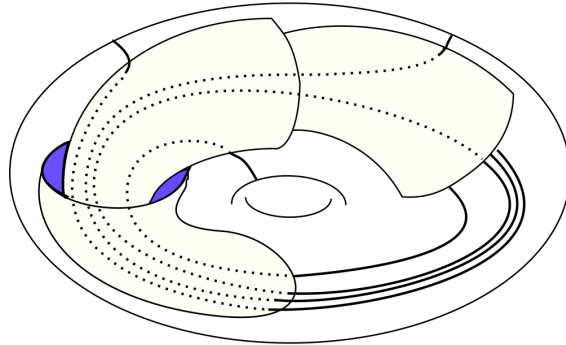
**EXAMPLE 0.6** A manifold whose ends form a set of derived length two. Below it is the same manifold, wrapped up as a leaf inside a foliation.



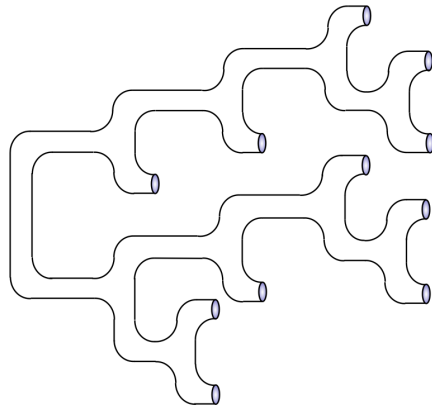
**EXAMPLE 0.7** The “Infinite Jail Cell Window” and the “Infinite Jungle Gym”. The first manifold is coarsely isometric to  $\mathbb{Z}^2$ , and the second to  $\mathbb{Z}^3$ .



**EXAMPLE 0.8** *The Reeb foliation of the solid torus.* The line field illustrates the flow of a vector field transverse to the leaves. Notice how the orbits go in, and never escape.



**EXAMPLE 0.9** *A leaf of the Hirsch foliation.* This leaf arises in the foliation obtained using a gluing map  $f : \mathbb{S}^1 \rightarrow \mathbb{S}^1$  which is a two-to-one mapping, such as  $f(z) = z^2$ .



**EXAMPLE 0.10** *A piece of a multi-foliation (or web) of a 3-manifold.* There are three foliations pictured here, with all leaves transverse. Every 3-manifold admits a multi-foliation.

