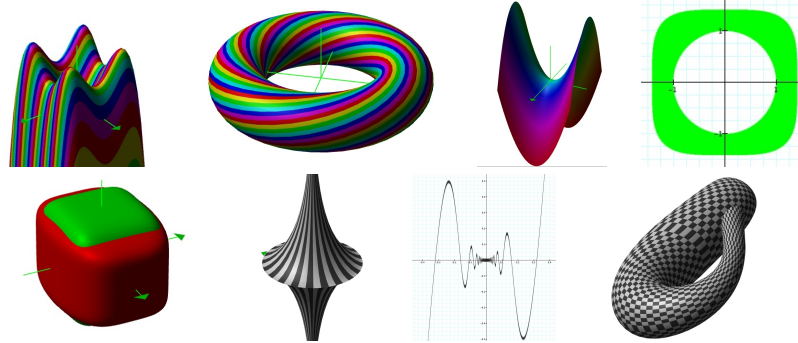


Ekaterina Puffini is the director of the Krill Institute of Technology. Peter Gilkey works with her; she is the smarter of the two and he does what she says (mostly).



She helps prepare his exams, she provides useful comments during his lectures, and she prepared graphics for Math 281/2 and for a 5-volume set which he and others wrote – the introductory chapter of which was used as a reference for Math 4/515.



1.1 METRIC SPACES

We present some basic material concerning metric spaces to establish notation; a good reference would be Baum [6] for point set topology and Rudin [36] for metric spaces. Let X be a set and let \mathcal{D} be a collection of subsets of X . We say that \mathcal{D} is a *topology* on X if the following axioms are satisfied:

1. If $\{O_i\}_{i=1}^n$ is a finite collection of elements of \mathcal{D} then $O_1 \cap \dots \cap O_n \in \mathcal{D}$.
2. If $\{O_\alpha\}_{\alpha \in A}$ is an arbitrary collection of elements of \mathcal{D} , then $\cup_{\alpha \in A} O_\alpha \in \mathcal{D}$.
3. The empty set and all of X belong to \mathcal{D} .

Ekaterina “flies on her own wings” to the Antarctic regularly to visit her Aunt who runs a nest and breakfast in the antarctic for Penguins - guano swept out twice a day (i.e. every 6 months); Ekaterina has written a paper with Peter

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[Submitted on 17 May 2006]

Puffini–Videv Models and Manifolds

P. Gilkey, E. Puffini, V. Videv

Let $J(\pi)$ be the higher order Jacobi operator. We study algebraic curvature tensors where $J(\pi)J(\pi^\perp) = J(\pi^\perp)J(\pi)$. In the Riemannian setting, we give a complete characterization of such tensors; in the pseudo-Riemannian setting, partial results are available. We present non-trivial geometric examples of Riemannian manifolds with this property.

and with Susana Campito (Directora del Centro Subacuático Salamandra) – see <https://pages.uoregon.edu/gilkey/dirAnsotanaJournal/Moo1.pdf> *Mathematical linguistics of the móo expression in Anso*.

As of June 2021, Peter will have spent 40 years at the University of Oregon; he began teaching at NYU 50 years ago. He has an airplane ticket to go to Spain this summer to continue his work in Linguistics with Susana. Peter’s passion is mathematics and teaching; Ekaterina’s passion is Krill. Peter is 75. Ekaterina declines to give her age. Both advise the graduating class of 2021:

**Happyness is a journey,
not a destination. Emerson**